DOCUMENT RESUME

ED 148 357 IR 005 462

AUTHOR	Montague, Eleanor; And Others
TITLE	Costs in Technical Processing and Interlibrary Loan--Data Processing User's Manual.
INSTITUTION	Western Interstate Library Coordinating Organization, Boulder, Colo.
SPONS AGENCY	Bureau of School Systems (DHEW/OE), Washington, D.C. Office of Libraries and Learning Resources.
PUB DATE	76
GRANT	G007500741
NOTE	192p.; Hard copy not available because of marginal legibility of the original document; For related documents, see ED 122 749, 134 225, 136 746, 136 748 and IR 005 461-465, IR 005 529
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	*Computer Programs; *Costs; Data Analysis; *Data Processing; *Interlibrary Loans; Library Networks; *Library Surveys; *Library Technical Processes; Manuals
IDENTIFIERS	*Western Interstate Bibliographic Network

ABSTRACT

This user's manual is a guide to the computer programs developed for the analysis of cost and volume data collected in a survey of technical processing and interlibrary loan supporting the development and implementation of a Western Interstate Bibliographic Network. Programs and analysis, developed in conjunction with ten data collection instruments and employing an IBM 360/195, are intended for use with these instruments. The programs are written in standard ANS Fortran with the exception of a Tab output format used in generating tables. The manual details data preparation, call statements from the main program to subroutines, input/output formats, and the generated tables. Program listings for in-depth cost analysis employed in twelve case studies are included. (Author/KP)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED148357

COSTS IN TECHNICAL PROCESSING AND INTERLIBRARY LOAN-- DATA PROCESSING USER'S MANUAL

COST AND FUNDING STUDIES OF THE PROPOSED

WESTERN INTERSTATE BIBLIOGRAPHIC NETWORK

Eleanor Montague, Program Director
Maryann Kevin Brown, Senior Staff Associate
Anita McHugh, Staff Assistant
Mary Haenselman, Secretary

Western Interstate Commission for
Higher Education
P.O. Drawer P
Boulder, Colorado 80302

The activity which is the subject of this report was supported in whole or in part by the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Office of Libraries and Learning Resources

IR005462

ACKNOWLEDGEMENT

The system described herein would not have been possible without the financial support of the U.S. Office of Education, Department of Health, Education and Welfare and the state library agencies of Alaska, Arizona, California, Idaho, Montana, Nevada, Oregon, South Dakota, and Washington. We wish to extend our gratitude to the libraries participating in these studies, and to the many librarians throughout the west and elsewhere for their continued support of these studies. Special thanks are due the computer user group and programmers of the National Center for Higher Education Management Systems (NCHEMS); especially Messers. Kent Weldon, Gregory "Woody" Leonhard, Ken Malanowicz, and Dave Makowski, without whose help and encouragement this system would never have been completed.

COSTS IN TECHNICAL PROCESSING AND INTERLIBRARY LOAN--
DATA PROCESSING USER'S MANUAL

TABLE OF CONTENTS

INTRODUCTION

1.1 Cost and Funding Studies of the Proposed Western Interstate Bibliographic Network 1

1.2 Purposes of the Manual 1

1.3 The Development of the System. 2

1.4 Limits of the System 2

1.5 Instruments Used in this Survey. 3

GUIDELINES TO THE USE OF THIS MANUAL

2.1 The Structure of the Manual 5

2.2 Case Study Analysis -- the Use of Activity Sheets 5

2.3 Survey of Costs -- Use and Analysis 7

2.4 Interlibrary Loan Survey 8

GENERAL DATA PREPARATION INSTRUCTIONS

3.1 Introduction 10

3.2 The Character Set. 10

3.3 Card and Column Numbers. 10

3.4 Placement of Numeric Data. 11

3.5 Special Questions 11

3.6 Reserved Columns 12

ANALYSIS OF THE ACTIVITY SHEETS: THE FACT SUBROUTINE

4.1 Introduction 13

4.2 Data Required for the Subroutine FACT 13

4.3 Calculation of Fringe Benefits 14

4.4 Preparing the Staff Lists for the FACT Subroutine 20

4.5 Preparing the Activity Sheets for the FACT Subroutine 22

4.6 Using the FACT Subroutine 24

4.7 Fatal and Non-Fatal Errors 26

ANALYSIS OF THE SURVEY DATA

5.1 Introduction 28

5.2 The Survey Data Set. 28

5.3 Stratification of Libraries for the Purposes of this Survey. . . . 28

5.4 Reserved Columns. 30

5.5 Alterations to the Coded Keypunching Format 30

5.6 Case Study Data Conversion. 37

5.7 Subprogram Calling Specifications 38

5.8 Subroutine Description and Calling Statements 41

THE INTERLIBRARY LOAN SURVEY

6.1 Introduction 43

6.2 Keypunching and Data Preparation Procedures. 43

6.3 Tables Generated for These Studies That Might be of Interest . . . 44

APPENDIX A
Publications List and Availability Statement 46

APPENDIX B
Definition of Terms and Mathematical Formulae. 49

APPENDIX C
Samples of Revised Pages 54

APPENDIX D
Samples of Correctly Punched Data. 59

APPENDIX E
Tables Generated From the Survey Instrument Data 63

APPENDIX F
Tables Generated by the FACT Subroutine 122

APPENDIX G
Sample Deck Set Ups 132

APPENDIX H
Program Listing for the FACT Subroutine 136

APPENDIX I
The Con Subroutine Program Listing and Sample Output 146

INTRODUCTION

1.1 Cost and Funding Studies of the Proposed Western Interstate Bibliographic Network

The Western Interstate Library Coordinating Organization (WILCO) of the Western Interstate Commission for Higher Education (WICHE) conducted cost and funding studies supportive of the related investigations into the development and implementation of western interstate bibliographic network capabilities. These studies were funded through the U.S. Office of Education under Grant No. GOO 7500741 and were additionally supported by the ten member states of WILCO. As a part of these studies, three separate examinations were conducted into the costs of technical processing and interlibrary loan, and the interlibrary loan traffic throughout the west. These studies are:

a. Survey of Costs in Technical Processing and Interlibrary Loan.
b. Case Studies of Costs in Technical Processing and Interlibrary Loan.
c. Survey of Interlibrary Loan Traffic in the Western States.

Studies were conducted concurrently in seventy-six libraries in seventeen western states and British Columbia. Academic, public and state libraries were represented. The purposes of these studies were to determine representative costs of library services in areas of potential network support, and to determine the current patterns of interlibrary loan traffic throughout the West. In addition, the cost and funding studies explored the potential impact of network services upon library costs, and the economic issues and implications of networking. The reader is directed to the list of publications in Appendix A for a complete account of the available documentation on these surveys and other products of the cost and funding studies.

This User's Manual represents the documentation of programs and use of the system of programs designed by WILCO for the analysis of data collected in the two surveys and the case studies.

1.2 Purposes of the Manual

The User's Manual is designed to assist the general public in using the programs developed for analysis of data collected in both surveys and the case studies. These programs were developed to manipulate data from questionnaires designed for the survey of costs and activity sheets used in a three-week data collection in twelve libraries -- public, academic and state. Because of the nature of surveys, it is believed that the programs and related questionnaires will be of selective research use. However, the case study data collection in three major areas of technical services -- acquisitons, cataloging, and serials -- and in interlibrary loan can be of great assistance to the library community in assessing local costs and staffing patterns within department of a single library or for comparative studies in several libraries. For this reason, the thrust of this manual is upon the analysis of cost data within case studies. However, we have also made available to the reader specifications for call statements and use of survey programs. Due to the length of the survey subprograms (3000 statements), this program listing does not appear in the User's Manual. However, these programs will be made available upon request. For details regarding the procurement of these series of subprograms, the reader is directed to the availability statement in Appendix A.

The programs used in the analysis of the Interlibrary Loan Survey are available through the OSIRIS III (an integrated collection of computer programs for the management and analysis of social science data) of the University of Michigan. Because these programs are copyrighted, we are not able to document them in this manual. An explanation of use, description of tables, and data preparation are given here, only.

1.3 The Development of the System

This system was developed in FORTRAN IV in an IBM RJE (remote job entry) environment connected to an IBM 360/195. All input is the standard 37 character set (26 letters of the alphabet, ten numerical digits, and the decimal point). With a single format exception, the programs are written in ANS (American National Standard) FORTRAN. Output tables are based on the availability of 132 characters per line, and many of the tables use all 132 characters. Unless this line length is available, the user will find that many of the output tables will overflow and, thus, not produce results. The one format exception mentioned earlier is the use of the T (Tab) output format used to align table print outs. This is used to tab the carriage (as with a typewriter) to the desired column in which printing a line should begin. Most systems allow for the T format, and this format should not disturb the use of the programs. The user should note that each computer system has a unique JCL (job control language) and must make adaptations appropriate to the local system. In addition, the system of programs is unique to the IBM RJE environment, and must be adapted to the user's environment, as necessary. These adjustments and limitations should be discussed with a qualified programmer familiar with the computer system which the user intends to employ.

1.4 Limits of the System

The accuracy of the data and the use of the final results are at the discretion of the user. WILCO/WICHE cannot guarantee this product beyond its accuracy at the time this manual was published, and for the data on which it was initially used. The reader is reminded that these programs were developed in an IBM RJE environment, and that all JCL included in the programs are unique to the particular IBM 360/195 employed by this project.

1.5 Instruments Used in this Survey

This guide is based upon the use of ten instruments, used by WILCO during the course of these studies. They are:

FOR THE SURVEY OF COSTS IN TECHNICAL PROCESSING AND INTERLIBRARY LOAN

Form No. 2: Survey of Costs in Technical Processing and Interlibrary Loan. This form is designed to gather gross costing data within acquisitions, cataloging, serials, materials finishing and interlibrary loan. In addition, certain aspects of staffing patterns, processing support, and interlibrary loan patterns are examined.

FOR CASE STUDIES IN COSTS IN TECHNICAL PROCESSING AND INTERLIBRARY LOAN:

Form No. 3: In-Depth Case Study of Costs in Technical Processing and Interlibrary Loan. This form is an expansion of Form No. 2, above, which captures additional costing components such as facility and administrative overhead, as well as costing information necessary for the three-week data collection in technical processing and interlibrary loan to be performed during the study.

Form No. 4: Acquisitions Activity Sheet. This form is a log sheet to be maintained by each staff member performing acquisitions tasks. Kept on a daily basis, this form monitors the time spent and volume processed in 34 activities.

Form No. 5: Cataloging Activity Sheet. This is a log sheet to be kept by each staff member associated with cataloging. Maintained on a daily basis, this form monitors 22 specific activities.

Form No. 6: Serials Activity Sheet. This form is also a log sheet maintained by staff members associated with serials processing. Maintained on a daily basis, 18 specific tasks are monitored for staff time and volume processed.

Form No. 7: Interlibrary Loan Activity Sheet. This log sheet is to be kept by staff members associated with interlibrary loan. This form monitors 25 specific activities in borrowing and lending functions of ILL.

FOR THE SURVEY OF INTERLIBRARY LOAN TRAFFIC:

Form No. 8: Interlibrary Loan Borrowing Transaction Form. This is a single-page tracking document to monitor lag time, type of request, queried institution, and disposition of the request for a sample of transactions received by patrons for materials owned by another library.

Form No. 9: Interlibrary Loan Lending Transaction Form. A one-page tracking document, this monitors lag time, type of request, requesting institution, and disposition of request for a sample of transactions received from another library for materials believed to be owned by the case study library.

The user should have these instruments at hand while examining this manual. It is imperative that the format of the questionnaires be maintained for appropriate use of the programs. Certain flexibility for local modification exists in the design of the activity sheets which is detailed in following sections.

GUIDELINES TO THE USE OF THIS MANUAL

2.1 The Structure of the Manual

The manual is separated into four sections:

- General data preparation: A general guide to the user on formatting, and keypunching instructions.
- The Case Studies of Technical Processing and Interlibrary Loan: A guide to the manipulation of data from the Form #3, In-Depth Case Study in Costs in Technical Processing and Interlibrary Loan for use in specific analysis of the Activity Sheets (Forms #4 through #7), data preparation instructions, and the call statements in the main program necessary for the use of the FACT subroutine, with a description of the tables generated.
- The Survey of Costs in Technical Processing and Interlibrary Loan: An instructional guide on specific data preparation instructions for the background instruments (Forms #2 and #3), subroutine calling specifications, and a description of the tables generated.
- The Interlibrary Loan Survey: A brief description of the survey instruments, Forms #8 and #9, which were used to monitor both borrowing and lending transactions during a three-week period in 64 libraries, and a discussion of the OSIRIS packages employed and output tables generated.

The serious user should study the general data preparation instructions before using the appropriate sections of this guide relevant to his/her study.

2.2 Case Study Analysis -- the Use of Activity Sheets

The activity sheets, Forms #4 through #7, are designed for the individual cost analysis of a single library. The purpose of the form is to discern:

- Staffing characteristics of individual tasks, and functional areas (i.e., cataloging, serials, acquisitions, and interlibrary loan).
- Total direct costs and unit direct labor costs by task.
- Percentages of tasks and task costs by staff type (i.e., professional librarian, other professional, clerical, library assistants, students, other, and staff paid by other than the library).
- Allocation of departmental overhead across tasks, according to staff time.

The forms themselves may be expanded or redesigned to meet the special needs of the local library, or group of libraries under consideration. The only limits set upon such adjustment is that the expansion of any single form should not extend past fifty distinct activities. Additionally, the analyst should maintain rigorous control over the activities and conformity to the definition of activities, and the units of count employed by participating staff members. Output tables for any single functional area consist of:

Table I:	Time Profile: A table indicating the number of minutes spent on each task by category of employee, the total time spent in the task by type of employee, and the percent of the total employee-type time spent in this task.
Table II:	Task Time Profile: A table indicating the total task time spent by all categories of employees, the percentage of that total task time by category of employee, the volume reported (if applicable) and the resulting unit time.
Table III:	Cost Profile: A table indicating the direct salary (salaries plus fringe benefits) costs by task and employee group, the total direct salary cost, the administrative task cost (which represents the administration department budget disbursed over the total library full-time equivalencies reported), the volume reported, and the resulting direct labor unit cost, administrative overhead unit cost and the total labor cost (direct labor plus administrative overhead).
Table IV:	Profile of Total Task Cost: A table indicating the direct labor task cost, the administrative department overhead, the unassigned, administrative, or supervisory cost overhead, as observed during data collection, and the resulting total labor costs (including prorated cost of nonprocessing related costs and administration), and a percentage of total costs created by the supervisory or unassignable overhead and by staff category.

Obviously, then, the analysis can be expanded to other functional areas beyond technical services or interlibrary loan. The flexibility inherent in the forms and the output tables allow the user freedom in directing the analysis into other areas of library service, or in refining the activities presently employed on the forms. Application of these forms can be made upon the following types of problems within the library:

- Analysis of task costs and staff time spent in either a few tasks or an entire library.
- Examination of tasks expected to change with the introduction of new services, as comparative data for similar examination after the introduction of a new service.
- Analysis of staffing in areas of library service.

The adaptation to local situations allows the analyst to use the programs to assess local costs, staffing, etc. in any area and to any degree needed to meet the local situation. During the studies of individual libraries for this project, a three-week interval was selected for examination. The length of time is, of course, a local option. In situations where the throughput or staffing requirements fluctuate greatly over a period of time, it is recommended that data collection extend either over a longer period of time, or during several intervals at different times throughout the year, or at intervals over wide ranges of time (e.g. several days a week over a two-month period). Similarly, if throughput and staffing are stable, the need to collect data over a three-week period is diminished. However, the analyst should be aware that it is often helpful to those collecting data to have a training period for trial of the forms. This enables staff members to adjust to the definitions of tasks and methods of data collection.

The reader is directed to Section 4 for a full account of the programs used in the case studies of costs in technical services and interlibrary loan.

2.3 Survey of Costs -- Use and Analysis

As mentioned earlier, the survey format described in section 5, Analysis of Survey Data, may not be of general use to the user unless a similar survey is conducted. The purposes of the survey were to detect average expenditures and ranges across several functions and across a broad range of libraries. The survey is based upon a random sample stratified into type and size of libraries. Our survey employed the following strata:

Academic Libraries

Large (over 960,000 volumes in holdings)
Other (less than 960,000 volumes in holdings)

Public Libraries

Large (over 820,000 volumes)
Regional (less than 820,000 volumes and serving a group of independent libraries within two or more counties)
Other (less than 820,000 volumes)

State Libraries

These six strata comprise the groupings into which survey results were presented. Programs used in analysis of the survey data were designed to handle thirty libraries in each stratum, for a total of 180 libraries. The user of the survey programs may find the strata designations inappropriate to the needs of data analysis he/she wishes to perform. However, these designations may be useful as a segregation of data, or for instance, where survey participants exceed thirty libraries (the maximum limit of libraries which can be handled in analysis of a single stratum). Also, the reader should be aware that headings employed in the tables reflect the classification of strata used in this survey. (i.e., Large Academic Libraries, Other Academic Libraries, Large Public Libraries, etc.). Format and print statements would necessarily have to be adjusted by the user if strata titles were inappropriate for his/her needs. The reader is advised that these strata definitions are also used to encode certain data from the questionnaire. In encoding data for the interlibrary loan section of both questionnaires, Form #2 and Form #3, major lender and borrower information (the final page of the questionnaire) was encoded to reflect whether these libraries were large academic, other academic, large public, regionals, other publics or state libraries. These designations conform to the definitions used for the strata.

A description of the tables and sample tables appear in appendix E. There are 32 tables generated from the cost survey program. As mentioned earlier, the subprograms represent about 3000 statements. For this reason, only call statements, data preparation and output tables can be included here. Appendix A includes an availability statement of the full program including subroutines.

2.4 Interlibrary Loan Survey

The purpose of the interlibrary loan survey was to determine the traffic and characteristics of borrowing and lending transactions throughout the western states. The use of the OSIRIS programs allowed for univariate and bivariate analysis of the data. The programs are especially useful in discerning the types of materials most often requested and lent. For the individual library, it can be a valuable tool in monitoring the usefulness of a bibliographic center, in monitoring lag times through certain lending institutions, and as a guide to possible areas of collection development. For several libraries, it can assist in the assessment of regional interlibrary loan services and networking, as well as monitoring the level of self-sufficiency within the region. The interlibrary loan forms are a part of the public domain, and can be used by any individual interested in studying interlibrary loan traffic. The programs used, however, are copyrighted by the University of Michigan and we are not privileged to make these available to the reader. However, both the OSIRIS programs which we used in our analysis and the canned packages of others, such as SPSS, are available through a variety of sources which the reader may wish to investigate.

Our survey of interlibrary loan was based upon equal interval sampling dependent upon the expected interlibrary loan volume. During a three-week period borrowing or lending requests were tagged for inclusion in the sample at intervals of one, three, five, ten or twenty (depending upon the interval established for the participating library). During analysis, these observations (i.e., completed forms) were weighted according to the interval employed (e.g., if every third request were tagged, the weight by which these observations were multiplied was 3).

GENERAL DATA PREPARATION INSTRUCTIONS

3.1 Introduction

All ten forms described in Section 1.5 of this manual have been coded to allow most data to be punched directly from the form. This eliminates the need for recoding or encoding all data from the book or sheet to a coding form of some variety. Due to the complicated nature of the two background instruments (forms #2 and 3), some coding is necessary, and these necessary adaptations to the form are explained in following sections of this Manual.

The user should keep in mind that bad data input to any mathematical computation is compounded during that computation, and thus the user should endeavor to maintain a reasonable level of accuracy. Appendix D contains selected samples of correctly punched data from all the ten instruments.

3.2 The Character Set

For all ten forms, the character set includes the following:

- *the numbers 0 through 9
- *the decimal point "."
- *the alphabetic characters A through Z
- *the minus sign, "-"

There are no other characters used; no parentheses, no percent signs, no dollar signs, no commas. The minus sign is used only as a flag in two special circumstances, described in 4.3.

3.3 Card and Column Numbers

The user will, in looking over the data collection instruments, have noticed that there are numbers in parentheses, such as (C1) and (C57) and (38), (14, 15) and (21 -30) appearing in the right margin of the background forms and under page/column headings in both the background forms and the activity sheets. These numbers are generally smaller in size than the characters in the body of the form. Numbers preceeded by "C",and enclosed in parentheses,are found only in the two background forms; these refer to the card number, and range from 1 to 77. The numerical entries in parentheses, e.g., (14,15), are found on all forms and are used to denote the column numbers of an 80 column punched card in which these data are to be punched. These numbers,between 11 and 80, may be for a single column, e.g. (36), or (16,17),to indicate two columns,or (31-40) to indicate all columns between,and including,31 and 40. These column numbers are normally marked (or printed) on the face of computer punch cards. Again, the user is reminded that there are some adjustments to the background instruments (Forms #2 and 3) that must be made before the instrument is ready to be keypunched. Where adjustments are necessary, these changes will be noted in the following sections of this manual. For specific instructions concerning the activity sheets, see Section 4; for the cost survey, see Section 5; and, for the interlibrary loan survey, see Section 6.

3.4 Placement of Numeric Data

All numeric data are to be right justified in the field specified for it. That is, if the field length is 5, e.g., (15-19), the number 134 must be entered as ƀƀ134 where ƀ indicates a blank. In this case, the number entered as ƀ134ƀ would be read by the computer as 1340. In general, the right most digit must be in the right most columns of the allocated field (i.e., column designated for the entry).

3.5 Special Questions

There are two types of questions that do not require numeric data within the questionnaire, but must be encoded (assigned a numerical coding) for input requirements: (1) those that are to be answered with a yes or a no and (2) those where the user/librarian is required to check statements which are true or describe his/her situation. For those that require a yes/no answer (e.g., "Do you like your hot fudge sundaes with a cherry on top? yes___, no___"), the response is coded and then punched as follows:

Code	Response
1	yes or positive response
2	no or negative response
3	sometimes, maybe, only on Sundays, i.e., a qualified response
0	blank or no response at all

The following example illustrates the coding the second type of question, i.e. those that require checking a true statement:

Please indicate below those qualities that apply to you.
I am charming ( )
I am witty ( )
I am beautiful ( )
I am handsome ( )
All of the above ( )

The user should code these responses as follows:

1	for those items checked
0	for those items left blank.

3.6 Reserved Columns

On all ten forms, the first ten columns of input punched cards are reserved for either data, card, form, or page identification. Some columns are for the user who might wish to review (or verify) the data; other information in these columns is necessary for the computer to search and verify that the system has the correct card of data for processing; and, of course, some information is explanatory of identification for both the user and the system.

The identification columns common to all forms and all cards are as follows:

Col #	Explanation
1	Form # (2,3,4,5,6,7,8,9)
2-6	used differently for different forms (refer to section 4 for activity sheets, section 5 for cost survey, and section 6 for the interlibrary loan survey)
7,8,9	library number (this cannot be zero) as described below
10	unique for different types of forms (refer to specific sections following)

The library number, placed in reserved columns 7-9, cannot be zero. The user may use a "dummy" number, or employ the number to indicate stratification and identification when analyzing data from several libraries. For our use of the library number as identification, the reader is directed to section 5.

ANALYSIS OF THE ACTIVITY SHEETS: THE FACT SUBROUTINE

4.1 Introduction

This section describes the generation of the time and cost profiles (activity sheet summaries, Tables I through IV) exhibited in Appendix F. The information required for these analyses is derived from staff lists (pages 7 through 12) of the case study background instrument and the set of activity sheets (form numbers 4, 5, 6, and 7). In addition, the generation of employee hourly cost lists is discussed. Sample hourly cost lists cannot be reproduced in this report due to the confidential nature of the information.

The subroutine used to produce time and cost profile tables is called FACT. It has been designed as an all purpose unit capable of analyzing any set of not more than 50 unique tasks, performed by a set of not more than 50 distinct staff members. Although, for the purposes of this study, the subroutine was employed to analyze data gathered in acquisitions, cataloging, serials, and interlibrary loan, the subroutine can also be used for analysis of reference, circulation, or any functional area within the library, within the limits stated above.

In addition, one task can be allocated for administrative tasks, breaks, lost time, peer consultation, and so forth. We employed this task designation in all areas, for example,task number 31 on the acquisitions activity sheet (form #4). If the user is designing his/her own activity list, it may be beneficial to include such a task. The system will distribute the total cost of this task to all other tasks under consideration in the Summary Table IV. This is optional, and may be omitted with no adverse effect on the running of the subroutine. The subroutine FACT is listed in Appendix H . The following subsections are intended to instruct the user in the preparation of input, the requirements of the main program and call statements, and the specifications of the deck set-up.

4.2 Data Required for the Subroutine FACT

There are three groups of input data required for the use of the FACT subroutine. They are (in order of input):

- the paid days off, fringe benefits, and sabbaticals (pages 11 and 12 of form #3)
- the staff list (not to exceed 50 employees for any functional area, e.g., cataloging), formatted as Form #3 page 10 if the user is using his/her own list of tasks and staff; otherwise from pages 7-10 of form #3.
- the set of activity sheet tasks (not more than 50 separate tasks) including a header/description card for the set of activity sheets.

All data are punched on 80 column cards and read into the subroutine from those cards. As explained in Section 3, the general data preparation instructions, the first 10 columns are reserved for identification for both the user and the computer system. As a reminder, column 1 is for the form #, columns 7, 8 and 9 are for the library number which will be printed on all output and must not be zero. All data placed in numeric fields must be right justified.

4.3 Calculation of Fringe Benefits.

Fringe benefits are considered to be any benefit which a library employee receives from the library or parent organization for which he or she does not pay. These benefits include vacation, sick leave, and sabbaticals.

This information has been requested on pages 11 and 12 of form #3, the background information for the case study libraries The following section explains how this information must be prepared for input to the FACT subroutine. See Table 4-1.

Table 4-1. Preparation of Card Numbers 1-4: Paid Days-Off and Fringe Benefits.

Col #	Explanation
1	form # (in this case 3)
2,3	page number from which the information is punched (in this case, 11)
4,5	blank
6	card number (1, 2, 3 or 4)
7, 8, 9	library number
10	blank
11-15	information pertaining to professional librarians, classification a
16-20	information pertaining to other professionals, classification b
21-25	information pertaining to library assistants, classification c
26-30	information pertaining to library clerks, classification d
31-35	information pertaining to student assistants or pages, classification e
36-40	information pertaining to other types of library employee, classification f
41-45	information pertaining to staff members paid by out-of-library sources, classification g

Fringe benefit data is punched on cards numbered 1 to 5 in the following order:

Card #1: paid holidays (page 11, lines 8 through 25, item a)
Card #2: paid sick leave (page 11, lines 8 through 25, item b)
Card #3: paid vacation (page 11, lines 8 through 25, item c)
Card #4: fringe benefit rates which are calculated as the percentage of the employee's salary or wages to cover insurance, retirement, etc. (page 11, lines 1 through 7, item c, the total column)
Card #5: sabbatical (page 12, items 26 through 29)

These cards are essential. If this information is not available for cards #1 through #4, these cards may be left blank, and the system will assume zeros for all necessary information. For the benefit of the user, it is recommended that the card number be entered on blank cards to guarantee the correct order of input. Card #5, however, requires additional information as explained in Table 4.3, Example 5 below, and cannot be left blank. All these cards, even if blank, must be included in the input deck to maintain the necessary data stream. The following are examples to demonstrate the manner in which the necessary information is punched.

Example 1. Card #1, Paid Holidays (from page 11, form #3).

If paid holidays (e.g., Christmas, Thanksgiving, etc.) total eleven days for all employees, Card #1 would look like the following example for library number 900.

311ƀƀ1900ƀƀƀƀ11ƀƀƀ11ƀƀƀ11ƀƀƀ11ƀƀƀƀ0ƀƀƀ11ƀƀƀ11 (the remaining columns are blank)

Example 2. Card #2, Sick Leave (page 11, Form #3).

For example, all paid employees, except student assistants, receive ten paid days of sick leave annually. This card would appear as follows for library 900.

311ƀƀ2900ƀƀƀƀ10ƀƀƀ10ƀƀƀ10ƀƀƀ10ƀƀƀƀ0ƀƀƀ10ƀƀƀ10 (the remaining columns are blank)

Example 3. Card #3, Paid Vacation (page 11, Form #3).

In this case, student assistants in library number 900 receive no paid vacation. Paid vacation for professionals (librarians and others) is equivalent to 22 days annually. Other employees receive ten days of vacation annually, during the first ten years of employment by the library; fifteen days after eleven years of employment and up to twenty years of employment; and, after twenty years of employment by the library, employees receive twenty days. Incremental vacation is punched as follows for this case:

311ƀƀ3900ƀƀƀƀ22ƀƀƀ22ƀƀƀ-5ƀƀƀ-5ƀƀƀƀ0ƀƀƀ-5ƀƀƀ-5 (the remaining columns are blank)

311ƀƀƀ900ƀƀƀƀ10ƀƀƀ10ƀƀƀ20ƀƀƀ15ƀƀƀ25ƀƀƀ20 (the remaining columns are blank)

The "-5" in fields allocated for the library assistant (columns 14-15), clerk (columns 19-20), other type of employee (columns 29-30), and staff paid by outside sources information (columns 24-25) are flags to the program to prepare for additional cards on incremental vacation for these types of employee. For each flag indicated on card #3, there would be an additional card of the second type immediately following card #3 indicating the days of annual vacation granted and the upper limit of years employed for which this amount of vacation is given. Cards of the second type must be punched to include three increments. That is, if only two increments are granted over employment, the second increment should be repeated in columns 31 through 40. Nor does the system allow for more than three increments. There must be one card of this second type for each employee classification for which the -5 flag has been entered in the first card. These cards must be in order of classification. That is, the card indicating incremental vacation for library assistants would precede that for clerks, which would precede the card for other employees, and so forth. The information on this second card type beyond the first 10 identification columns is indicated in Table 4-2. The subroutine also allows for similar increments in sick leave. The minus flag for incremental sick leave is -3. This would be punched exactly as indicated in this example for the -5 flag. The format of the second type of card is the same, and there must be a card of the second type for each classification field for which the minus flag is entered in card 1.

The user should be aware of the fact that incremental sick leave and/or vacation may apply to all, and vary with, classifications of employee. If the library has no incremental vacation or sick leave plan (i.e., if all employees receive the same number of days of paid vacation or sick leave regardless of the number of years employed by the library), these annual data are punched in the same format as the paid sick leave and number of paid holidays cards in examples #1 and #2.

Example 4. Card #4, Fringe Benefit Rate (page 11, Form #3).

In this example, library number 900 provides an average of 13% of salary for fringe benefits to all employees, except student assistants who receive 6% of salary in fringe benefits. This would be punched as follows:

312ƀƀ4900ƀƀƀƀ13ƀƀƀ13ƀƀƀ13ƀƀƀ13ƀƀƀƀ6ƀƀƀ13ƀƀƀ13 (the remaining columns are blank)

Table 4-2. Specifications for Cards on Incremental Sick Leave or Vacation.

Col #	Explanation
11-15	upper limit of years employed by library to qualify for the first increment of paid vacation (or sick leave)
16-20	first increment of paid vacation (or sick leave)
21-25	upper limit of years employed by the library to qualify for the second increment of paid vacation (or sick leave)
26-30	second increment of paid vacation (or sick leave)
31-35	final limit on paid vacation (or sick leave) or maximum number of years employed by the library. The system will select the corresponding increment of paid vacation (or sick leave) for all employees employed by the library for more than the upper limit entered into columns 21-25. However, this field must not be zero.
36-40	final increment of paid vacation, that is, the maximum number of days of paid vacation (or sick leave).

The final card of fringe benefit information is on sabbatical plans that the library may have. This is requested on page 13 of the background survey instrument. This card may not be all blank. The following table shows the format of the card on sabbaticals.

Table 4-3. Sabbaticals

Col #	Explanation
1	form # (in this case, 3)
2,3	page number (in this case, 12)
4,5	blank
6	card number 5
7, 8, 9	library number
10-14	blank
15	response to question 26. If the response is no, a 2 is punched in this column and the rest of the card is left blank. If the response is yes, a 1 is punched in this column, and the other information must be entered as follows.
16-19	blank
20	response to question 27, the classification of those employees receiving sabbatical benefits
21-25	response to question 29, the length of the paid sabbatical in whole months at full pay
26-30	response to question 28, interval at which a qualified employee becomes eligible for sabbatical in number of whole years.

The following example displays a correctly punched card #5.

Example 5. Card #5, Sabbatical (From page 12, Form #3).

This example represents library number 900, which allows an eight-month sabbatical to professional librarians every ten years. Card #5 would be punched as follows:

312ƀƀ5900ƀƀƀƀƀ1ƀƀƀƀ1ƀƀƀƀ8ƀƀƀ10 (remaining columns are blank)

Note that the eight months are calculated at full pay in this example, and that, if the library had given eight months at half pay, a 4 for the number of whole months would have been entered in column 25 to represent sabbatical pay.

4.4 Preparing the Staff Lists for the FACT Subroutine

The staff lists are found on pages 7 through 10 of the background data form for the case studies (Form #3). If the user has provided his/her own set of activity sheets, merely use the format of one of these pages for the staff list. As with all other forms and data, the first 10 columns are reserved for identification useful and necessary to both the user and the computer. The column reservations are as follows:

Col #	Explanation
1	Form #, in this case a 3
2,3	page number, either 7, 8, 9, 10
4, 5, 6	blanks
7, 8, 9,	library number, not a zero
10	blank

Note that the columns into which the data are punched are the columns (field) specified at the top of the page under the column headings (e.g., (11-15) for employee ID number, (20) for type of employee, (21-30) for annual salary and so forth). There is one column change; under i, the employee's supervisor's identification may take up to 5 columns (i.e., columns 46-50 instead of only the specified columns 49 and 50). All data on salary should be right justified in the appropriate field. The hourly wage may be punched as a real number (e.g., $2.33 per hour would be punched as ƀ2.33 in columns 31-35). All other information is to be punched as right justified integers. Refer to Appendix B for a definition of right justified. The employee classification (professional librarian, other professional, etc.) should be punched as an integer (1-8) corresponding to the Alpha character (A-H) that is used to designate the grouping. That is, 1 represents A, 2 represents B, etc. The employee's identification and that of his/her supervisor may be punched as Alpha characters. Note that while A B and AB and A.B. may mean the same employee, the computer will read these designations as different employees. After the analyst has designated the employee identification, this identification must be used precisely and consistently for the activity sheets and all other references to that employee. Note that for the purposes of employee identification, the same guideline applies equally to numeric identification (e.g., 001 is not the same as ƀƀ1).

Examples of correctly punched cards for staff lists follow:

Example 6. Salaried employee working in two departments under study.

An employee, library assistant (category c), with an identification designation of A, is employed in Library number 900, earns $9000 annually, and works approximately twenty hours per week in acquisitions, and twenty hours per week in cataloging. This employee would have the following two cards punched, where he/she works a full twelve-month year and his/her supervisor has the identification designator, S.

```
307ƀƀƀ900ƀƀƀƀƀAƀƀƀƀCƀƀƀƀƀ9000ƀƀƀƀƀƀ2040ƀƀƀƀ5ƀƀƀƀS
```

```
308ƀƀƀ900ƀƀƀƀƀAƀƀƀƀCƀƀƀƀƀ9000ƀƀƀƀƀƀ2040ƀƀƀƀ5ƀƀƀƀS
```

Note that if this employee had worked twenty hours in acquisitions, and twenty hours in circulation (i.e. an area not being studied), only the first card would have been punched for input.

Example 7. Hourly employee working in one department under study.

In this case, a page earning $2.67 per hour at library number 900 has the Id., B, and works full time in interlibrary loan. He or she would have one card punched as follows, where his/her supervisor is #T.

```
310ƀƀƀ900ƀƀƀƀƀBƀƀƀƀEƀƀƀƀƀƀƀƀƀƀƀ2.67ƀ4040ƀƀƀƀ3ƀƀƀƀT
```

4.5 Preparing the Activity Sheets for the FACT Subroutine.

An activity sheet is basically a list of tasks numbered from 1 to N (where N is a number less than or equal to 50). Each set of activity task cards (i.e., those cards punched from one set of activity sheets) must have a header card containing the information on the Table 4.4. (The * indicates that this is not optional, and must be included, not blank or zero).

Table 4-4. Description of the Header Card.

Col #	Explanation
1-8	* eight alphanumeric characters to describe the set of activity sheets, e.g., ACQ for acquisitions. This identifier will be printed on the output tables.
12,13	* total number of tasks to be listed (not more than 50)
17,18	the number of the administrative type task, to be distributed over all other tasks (may be omitted)
19-28	the administrative department budget, the cost of which is also distributed over all other tasks according to the task time (may be omitted)
29-34	the total library FTE (used for distributing the administrative department costs equitably over all other departments of the library) This may be omitted.

Example 8. Header Card.

A set of acquisitions activity sheets could have the following header card.

```
ACQƀƀƀƀƀƀƀƀ37ƀƀƀ31ƀƀƀƀƀ15000ƀ22.5      (rest of card blank)
```

WHERE

ACQ	implies acquisitions and the ACQ will be printed as part of the output header
37	is the maximum number of tasks listed in this case, including those tasks listed under "other" by employees
31	is the administrative task number, the cost of which is to be distributed over the other tasks
15000	is the administrative department budget
22.5	is the total library FTE

The activity sheets themselves are easy to prepare. The following table shows the columns and the necessary information for columns 1-10. These are the identification numbers, the remainder are data, and are noted on the form. Cards only need be punched for tasks in which time data has been entered by the employee.

Table 4-5. Description of Activity Sheet Task Cards

Col #	Explanation
1	form # (either 4, 5, 6, or 7)
2-6	blank
7, 8, 9	library number (must not be zero)
10	blank
11-15	the employee's identification (must be identical to that used in the employee lists, pages 7 through 10)
19,20	the task number (which must be less than or equal to 50). The user need only punch cards for those tasks where there is time entered.
21-25	the time spent on this task in whole minutes
26-30	the volume processed (e.g., number of cards alphabetized or filed). If no data are supplied, these columns may be blanks.

The deck of activity task cards must end with a blank card, to signal the end of the deck. There is no order requirement within the deck itself (that is, task cards do not have to follow in sequence of task number or employee number).

4.6 Using the FACT Subroutine

Once data preparation is complete, two program statements within the calling program must be prepared to specify the library number (LIB), and the number of employees in the staff list (NOEMP). Since this is a FORTRAN program, the user is reminded that all statements within the main program and subroutines must begin in column 7. The two cards are equivalence (i.e.,"equal")statements. For example, library number 900, with 43 employees, would have the following two cards in the calling program:

```
LIB=900

NOEMP=43
```

The next card to be prepared is the call to the subroutine FACT. This call statement is:

```
CALL FACT(LIB,NOEMP)
```

And then, as with all FORTRAN programs, a final card is necessary to tell the computer that it has completed the job:

```
END
```

This is followed by the three sets of data (i.e., fringe benefit cards, staff lists, activity task cards) punched according to the specifications indicated in the previous four subsections. Additionally, the user must prepare and arrange the job cards appropriate to his/her installation, and according to correct keypunch specifications. The results of this program, subroutine and input are an employee hourly cost list and those tables I through IV, exhibited in appendix F.

It is possible to run more than one set of activity task cards at a time. Due to the possible multiple requirements of this situation, there are three other entry points (i.e., three other ways to call) the subroutine FACT.

The entry points and their uses and output are as follows:

FACT runs the entire subprogram, using all the information on pages 11 and 12, the staff lists and the activity sheets, producing the list of hourly staff cost and the time and cost profiles.

FACT1 uses only the information on pages 11 and 12 and the staff list to produce only the hourly cost list.

FACT2 after FACT or FACT1 has been run, uses previous information from pages 11 and 12 and a new staff list and a new activity sheet deck to produce both the hourly cost list and the time and cost profiles.

FACT3 after FACT or FACT1 or FACT2 has been run, uses previous information from pages 11 and 12 , previous staff list, and a new activity sheet deck to produce a new set of time and cost profiles.

Example 9. Calling Sequence

Library number 800 has a total of 45 employees working in combined acquisitions, cataloging and serial sections, and another 9 in interlibrary loan. So the calling sequence to produce hourly cost list, and time and cost profiles from the activity sheets for all departments, and all employees would be as follows:

```
LIB = 800

NOEMP = 45

CALL FACT (LIB, NOEMP)      (runs the first set of activity sheets,
                            i.e., acquisitions)

CALL FACT3 (LIB,NOEMP)      (these last two run the second and third
                            set of activity sheets, i.e., cataloging
CALL FACT3 (LIB,NOEMP)      and serials, using the same list of employees)

NOEMP = 9

CALL FACT2 (LIB,NOEMP)      (uses new employee list to run the final
                            set of activity sheets, i.e., interlibrary
                            loan)

END
```

For this example, the data deck would be set up in the following order:

1. cards 1-5 from pages 11 and 12, in order, holidays, sick leave, vacation (including one card for each group of employees that receives incremental sick leave or vacation as in the punching instructions section 4.3), fringe benefits, sabbatical;

2. the employee staff list, including identifications for all the employees completing activity sheets in acquisitions, cataloging and serials. (The program will stop if it can't match the employee's ID from the activity sheets with one in the staff list.);
3. activity sheet identification card for acquisitions (as described in Section 4.5, Table 4-3);
4. the deck punched from the activity sheets for the acquisitons department (i.e., acquisitions activity sheet deck), as described in Table 4-4;
5. a blank card. This is to signal the end of the activity sheets. (The program then summarizes and writes the time and cost profiles for acquisitions.);
6. activity sheet identifier for cataloging (as described in Table 4-3.);
7. cataloging activity sheet deck (as described in Table 4-4.);
8. blank card;
9. serials activity sheet identifier card (as described in Table 4-3.);
10. serials activity sheet deck (as described in Table 4-4.);
11. blank card;
12. the nine employee cards for the interlibrary loan department (as described in section 4.4);
13. interlibrary loan activity sheet identifier (as described in Table 4-3.);
14. interlibrary loan activity sheet deck (as described in Table 4-4.); and
15. blank card.

Refer to Appendix H for a listing of the FACT subroutine.
Refer to Appendix G for deck set-up examples for this program.

4.7 Fatal and Non-Fatal Errors

In producing the sets of tables there are three possible fatal errors. The first and second are related to incorrect count of the number of staff list cards. If NOEMP is less than the number of employee cards, the program will stop with no written message. If NOEMP is greater than the number of employee cards, the program will stop in that it has tried to process the activity sheet identifier card with alpha characters where it expected to see only numerics. The third is the most prevalent and also the most difficult to find, and that is, if the program is unable to match a member of the listed staff with the one that filled out the activity sheet. In this case the program stops with a STOP 55 in the system as a message.

The other error that may be encountered is a blank card or a zero in the activity sheet task time (columns 24,25). This will cause the program to end before the end of the data with no message to that effect.

ANALYSIS OF THE SURVEY DATA

5.1 Introduction

The data analyzed with the system of subroutines described in this section are derived from the two background instruments:

- Form #2, The Survey of Costs in Technical Processing and Interlibrary Loan, and
- Form #3, In-depth Case Studies of Costs in Technical Processing and Interlibrary Loan.

The system of subroutines to produce the output summary tables described and exhibited in Appendix E is accessed or called with a short Fortran program. There is a single control subroutine for each set of tables plus a basic statistics subroutine to provide the weighted mean (average), high and low observations, and the weighted standard deviation. These tables are generated from an array of not more than 30 data points (i.e., observations for a single table element) and their respective weights. Due to the complicated format structure of the instruments themselves, there is a single subroutine to search the data set (the set of all survey data from every library in the survey) stored on tape or disk and retrieve the appropriate card image or images for processing in each of the respective tables. By personal preference, the main control program and each of the control subroutines have associated with them a dictionary of words used in column headings and line labels and associated subroutines to access these dictionaries.

5.2 The Survey Data Set

The survey data set consists of 80 column card images punched or prepared from the survey instruments. These cards are numbered 1 through 77. This data set is written on a tape or disk rather than being used as card input to allow for multiple searches of the data set. The in-depth case study instrument (Form #3) is an expansion of the survey instrument (Form #2) and both Forms #2 and #3 are identically coded for keypunching responses to survey questions in which the information coincides.

The system assumes that the data present on tape or disk are correct; that all cases/libraries contain exactly 77 cards; and that all cards are in numerical order.

5.3 Stratification of Libraries for the Purposes of this Survey

For purposes of this survey, the libraries responding were divided into groups or strata according to size and type, to avoid comparing doughnuts to doughnut holes. The libraries were then numbered according to the group to which they were assigned. The keypunching format allocates 3 digits or columns to the library number, the first of which was used to distinguish the strata of libraries. The other two columns were unique to each library and used to identify a single library.

For example, library number 308 is different from library number 305, although both belong to the same grouping or stratum. There is no internal checking on size and/or type. The digit designating stratum is there to expedite the searching process, as the tables are generated for only one stratum at a time. All other numbers are ignored during the data set search.

The following table is a list of the codes used for stratum identification. This initial digit also indicates to the computer the appropriate heading that will be used in printing the summary tables:

Stratum Identification Number	Library Stratum
	large academic libraries, holding more than 960,000 volumes
1	state libraries
2	large public libraries, holding more than 800,000 volumes
3	other regional libraries, those public libraries holding less than 800,000 volumes and offering at least one type of regional service to libraries in at least two counties
4	other academic libraries, those holding less than 960,000 volumes
5	other public libraries, those public libraries not included in either large public or other regional grouping, and holding more than 3000 volumes.

In addition to specifying to the computer output headings and strata, these codes were used in encoding types of libraries lending and borrowing from participating libraries (see page 24 of Form #2 and page 34 of Form #3) which are summarized and printed in Tables X-G and X-H, frequency of borrowers and lenders tables. The user can change these definitions to fit his/her own situation, keeping in mind the headings generated and that he/she should be consistent throughout the analysis of the survey data.

5.4 Reserved Columns

For identification of the data contained on the card by both the user and the computer, the first 10 columns have been reserved as follows:

Col #	Explanation
1	form # (either a 2 or a 3)
2,3	page number (found in the upper right hand corner of each page, 1 through 26 for Form #2 and 1 through 35 for Form #3)
4,5	card number (1 through 77, noted with a "(C__)" in the right margin.) Only the digits are punched. Do not include "C".
6	blank
7,8,9	library number (with the first column, i.e., column 7, the stratification digit as explained in the previous section)
10	flag digit for the budget pages (that is, 14 and 15 of the survey Form #2, and 22 and 23 of the case study Form #3), or blank for all other cards.

5.5 Alterations to the Coded Keypunching Format

The expanded case study Form #3 is coded for keypunching exactly as the survey instrument Form #2. There are exceptions, however. In two sections the case study information does not correspond exactly with the survey information. Conversion requirements for Form #3 are discussed in Section 5.6.

The user should be aware of a problem arising from the processing of survey data, which may occur. There are three potential responses within the questionnaire which may exceed the allocated field length (e.g., the response is 100 and the field length allowed for only two digits). In these, as in any other cases of possible overflow, the user should enter a 9 in each of the columns in the allocated field (e.g., where two columns are allowed, enter 99). The system in these cases notes that true data exceeds the field (i.e., large data) and if possible and applicable corrects by adding the 1 (e.g., 99 becomes 100). These three exceptions to data input are noted in the following table. This table documents necessary changes to the coded keypunching format which appears in Forms #2 and #3.

Table 5-1. Alterations to Coded Keypunching Format

Page Number Form #2	Page Number Form #3	Explanation (question number, line number, and identification changes to be made, or codes to be employed)
1	1	question iii, card 1, columns 29-33 1 for calendar year (columns 30-33 blank). 2 mm nn (29-33) for fiscal year with mm beginning month, nn ending month. For example, fiscal year July 1 to June 30 would be coded 20706.
4	5	estimated title to volume ratio. Data should be placed on (C11). Cols 41-45 estimated titles Cols 46-50 estimated volumes. For example, 2 volumes per title or 1 title per two volumes would be punched as 1 in col 45, and 2 in col 50.
4	5	question I, union catalog or union list. Each positive response (bookstock, periodical, other) is allocated 2 columns. If the item is checked (i.e., a positive response) a 1 should be punched in the first specified column of the field; and in the second column, a 1 if the union catalog is computer produced, or a 2 if not computer produced.
7	13	cards 28 and 29, staff. Circumstances necessitated complete renumbering of the specified columns (fields) for responses on this page. Refer to Exhibit 5-1 for the renumbered edition. These data from Form #3 (page 13) must be transcribed from more than one page. Refer to section 5.6 on the conversion of case study data to the survey instrument format.
8-11	14-17	cards 30 through 44, support services. This was an area of possible extra large data (i.e., data which overflows the specified field). See introductory paragraphs of section 5.5 for general instructions on the use of the 9 fill in these cases. The system does not correct internally for a 99999 entry in these cases.
8-11	14-17	For those items where the function is checked (i.e., support services purchased) but no data on volume or cost is available, the code, -1, in the volume column will indicate a positive response (i.e., checked function).

Page Number		
Form #2	Form #3	Explanation
11	17	question G, card 44, columns 37-44, support systems. Codes employed are: For in-house development, a 1 should be punched in the appropriate column; for contracted development, a 2 should be punched in the appropriate column.
12	18	question H, computer systems. The single column indicated after "System name" is a single digit to indicate the system function (i.e., the area of support). The codes employed are: 1 Circulation 2 Acquisitions 3 Interlibrary Loan 4 Serials 5 Inventory Control 6 Cataloging 7 Processing 8 Accounting 9 Other
12	18	question L, system maintenance. If more than one organization is responsible for system maintenance, use additional columns. That is, note the first organization cited in column 68, the second in column 69, and so on to the end of the card, if necessary. Note that the entry in each column would correspond to the number associated with the organization (i.e., 1 indicates the library, 2 indicates the parent organization, etc.) which maintains the system.
14-15	22-23	Library Budget. For these two pages, column 10 is used as a flag to indicate library structure. For the first card (48 or 56) of each page, a 1 punched in column 10 indicates that the capital budget includes funds for a new building; a 2 indicates that the figure listed in bookstock budget (or expenditures) is the total materials budget. Column10 of the operating budget (cards 49 and 57) should be encoded as follows:

Page Number		
Form #2	Form #3	Explanation
14-15 cont'd	22-23 cont'd	1 indicates that the library only has a technical processing department without a separate acquisitions or cataloging department; in general only Administration and Interlibrary Loan can be considered in departmental analyses. 2 indicates that only Administration budget data can be considered relatively accurate; other departmental data are unavailable, or combined (as in technical service departments).
16	24	Question D, regional libraries. This is the second place in the questionnaire where there can be a possible data overflow. See general instructions for use of the 9 fill. The system will not correct 99 entries internally.
18	26	question G4, union catalog additions. Change columns from (29-33) to (29-35).
19	27	question G5, union catalog locations. Change columns from (34-35) to (36-45).
20	27	questions H15-H17, stipends for regional service. In the frequent case, where all support (i.e., 100%) is from a single source, enter a 99 in the appropriate columns; the system adds 1% when both 99% and only a single source of support are indicated.
22	31	question F, number of libraries queried. Punch the number (1 through 9) corresponding to the interval checked,(e.g., 4 would be punched if the interval 2.5-2.9 were checked).
24	34	card 77, frequent borrowers and lenders. The column numbers, 71-74, for card 76 are ignored. Instead, a new card is begun for this page. Exhibit 5-2 shows the coding form. Each borrowing or source library is identified with a two-digit code where the first is library type and the second digit indicates the location of the library relative to the location of the respondent (i.e., the library completing the form). The codes are as follows:

Library Type

1 Large Academic Library
2 State Library
3 Large Public Library
4 Other Regional Library
5 Other Academic Library
6 Other Public Library
7 Bibliographic Center
8 Special Library (medical, law, etc.)
9 Other Library (private, industrial, etc.)

LOCATION (RELATIVE TO THE RESPONDING LIBRARY)

1 Local (a location within certain bounds of proximity that the library considers "close-by", based upon turnaround and ease of access, and as specified by the respondent in the interlibrary loan section, question A, page 22 of Form #2, or page 31 of Form #3)
2 In-State
3 Adjoining State
4 Other Western States
5 Eastern States (or foreign countries, excluding Canada)

See Exhibit 5-2 for coding format. Refer to section 5.3 for definitions of the types and sizes of libraries.

EXHIBIT 5-1

I. PLEASE INDICATE BELOW THE STAFF BENEFIT RATE (PERCENT OF SALARY) GIVEN TO EMPLOYEES IN EACH OF THE FOLLOWING CATEGORIES: (c28)

1. Professional librarian ________% (11-14)
2. Other professional ________% (15-18)
3. Library assistant ________% (19-22)
4. Clerks ________% (23-26)
5. Student assistant/page ________% (27-30)
6. Other (excluding staff involved in plant maintenance) ________% (31-34)

J. PLEASE INDICATE BELOW THE FULL-TIME EQUIVALENCIES (FTE) PRESENTLY EMPLOYED IN YOUR LIBRARY IN THE FOLLOWING FUNCTIONS OR POSITIONS:

1. Business and financial staff (excluding book fund bookkeepers) ______________ (35-38)
2. Book fund bookkeepers ______________ (39-42)
3. Library planning ______________ (43-46)
4. Library fund raising ______________ (47-50)
5. Systems analysts ______________ (51-54)
6. Programmers ______________ (55-58)

K. PLEASE INDICATE THE AVERAGE SALARY INCREASES GIVEN DURING THE FOLLOWING YEARS BY CATEGORIES OF EMPLOYEE. THIS SHOULD REPRESENT THE COMBINED PERCENTAGE INCREASES OF MERIT AND COST-OF-LIVING INCREASES. PROMOTIONAL INCREASES GIVEN TO EMPLOYEES MOVING INTO NEW POSITIONS SHOULD NOT BE INCLUDED.

(c29)

TYPE OF EMPLOYEE	K. 1974		L. 1975		M. 1976 (est.)	
1. Professional librarian	%	(11-13)	%	(14-16)	%	(17-19)
2. Other professional	%	(20-22)	%	(23-25)	%	(26-28)
3. Library assistants	%	(29-31)	%	(32-34)	%	(35-37)
4. Clerks	%	(38-40)	%	(41-43)	%	(44-46)
5. Student assistant/page	%	(47-49)	%	(50-52)	%	(53-55)
6. Other (excluding staff involved in plant maintenance)	%	(56-58)	%	(59-61)	%	(52-64)

Initials __________

XIII. INTERLIBRARY LOAN (cont.)

EXHIBIT 5-2

W. PLEASE INDICATE BELOW INSTITUTIONS (INCLUDING BIBLIOGRAPHICAL CENTERS) WHICH MOST FREQUENTLY REQUEST MATERIALS FROM YOUR LIBRARY. RANK ACCORDING TO THE NUMBER OF REQUESTS MADE ANNUALLY, IF POSSIBLE. INDICATE THE NUMBER OF REQUESTS RECEIVED BY YOUR LIBRARY FROM THIS LIBRARY OR CENTER DURING THE LAST REPORTING YEAR, IF THIS STATISTIC IS AVAILABLE.

	LIBRARY NAME	LOCATION	NUMBER OF REQUESTS RECEIVED LAST YEAR	(c77)
1.				(11,12)
2.				(13,14)
3.				(15,16)
4.				(17,18)
5.				(19,20)
6.				(21,22)
7.				(23,24)
8.				(25,26)
9.				(27,28)
10.				(29,30)

11. WHAT PERCENT OF THE TOTAL REQUESTS RECEIVED BY YOUR LIBRARY FROM OTHER LIBRARIES (AS ENTERED IN QUESTION (J)) DO THE ABOVE REPRESENT? ________% (31-33)

X. PLEASE INDICATE BELOW THE TEN SOURCES (INCLUDING BIBLIOGRAPHIC CENTERS) FROM WHICH YOU MOST FREQUENTLY BORROW MATERIALS. RANK ACCORDING TO THE NUMBER OF REQUESTS THAT YOUR LIBRARY MAKES ANNUALLY, IF POSSIBLE. INDICATE THE NUMBER OF REQUESTS MADE OF THIS INSTITUTION DURING THE LAST REPORTING YEAR IF THIS STATISTIC IS AVAILABLE.

	LIBRARY NAME	LOCATION	NUMBER OF REQUESTS MADE LAST YEAR	
1.				(34,35)
2.				(36,37)
3.				(38,39)
4.				(40,41)
5.				(42,43)
6.				(44,45)
7.				(46,47)
8.				(48,49)
9.				(50,51)
10.				(52,53)

11. WHAT PERCENT OF THE TOTAL REQUESTS MADE, AS ENTERED IN QUESTION (C), DO THE ABOVE REPRESENT? ________% (54-56)

Initials ______

5.6 Case Study Data Conversion

There are two sections of the in-depth case study instrument (Form #3) that are not coded for keypunching in the required survey format. These are the staff lists and associated data, pages 7 through 13, and the equipment and communications costs, pages 19 and 20.

The staff lists can be converted manually with the aid of a calculator to conform data to the summary format of departmental staff (as in Form #2, page 6). The user should note that the total library, administrative department and materials finishing staff summaries are requested on page 13 of Form #3 and are in appropriate format. All the user need summarize are the data from the four pages of staff lists. If more than two or three staff members appear in each section or department, data can be more efficiently summarized with the use of the CON subroutine as listed in the Appendix I . This subroutine converts the staff lists (pages 7 through 10 of Form #3) to the summary output table identical in format to that of Form #2, page 6. (A sample output is reproduced in Appendix I.) The following four statements will access the CON subroutine. (Reminder: FORTRAN program statements begin in column 7):

```
LIB = 900

NOEMP = 43

CALL CON (LIB,NOEMP)

END
```

where LIB is the library number; and, NOEMP is the total number of punched cards for employees listed on pages 7 through 10. Refer to section 4.4 for instructions on keypunching these staff lists. There must be one card for each employee in each department. That is, if an employee spends part of the week in cataloging and part in the acquisitions department, this employee must have two cards for the CON subroutine so that his/her time is entered in both departments. The only input data required for the CON subroutine are cards punched from these staff lists.

Information pertaining to the staff benefit rate (item F, page 11, lines 1 through 6) with items J through M on page 13 must be transcribed into the survey format to fill cards 28 and 29. Refer to section 5.5 and exhibit 5-1 for the format of these cards.

Information pertaining to equipment and communications costs, (pages 19 and 20 of the case study instrument, Form #3) should be transcribed to the survey format of Form #2, for preparation of cards 46 and 47. The annual cost for copying equipment rental, supplies and maintenance in Form #3 (page 20, question C) is equivalent to question A, page 13 of the survey instrument, Form #2, and should be input as such. That is, the annual cost of copying is entered as the first data element (columns 11-17) on card 46. The annual communications costs are then entered in the remaining columns of cards 46 and 47. The order of the information requested is the same on both instruments. However, Form #3 does not include card and column identifiers for annual cost information. Additional information on communications (i.e., purchase price and date of purchase) in Form #3 should be ignored. The user should compare the questions in Form #3 and Form #2 to verify that he/she has transcribed the information correctly. Exhibit 5-3 is a sample page from the survey instrument (Form #2).

5.7 Subprogram Calling Specifications

The system was written in FORTRAN and access to subroutines is made through a short FORTRAN calling program. The data from the survey instruments are assumed to be on tape or disk, unit 8. In addition to these data, inputs to the calling program are two 5-digit numbers: The first input indicates the stratum from which the user wishes to generate the summary tables, and the second input denotes the number of libraries in that stratum. These two may be input either from the card reader or specified in the calling program. The number of libraries in any one stratum must not exceed 30. The specified calling digits are as follows:

1	Large Academic Libraries
2	State Libraries
3	Large Public Libraries
4	Other Regional Libraries
5	Other Academic Libraries
6	Other Public Libraries.

The user will note that these digits are the coded stratum designator digits (as explained in section 5.3), plus 1.

The user must designate the unit on which the survey data is stored as unit 8 in the job control cards he/she uses. Due to the complicated nature of the system of programs, it is recommended that the user enter all subroutines into a library.

IV. PROCESSING AND REFERENCE SUPPORT (cont.) EXHIBIT 5-3

M. PLEASE DESCRIBE THE PRIORITY THE LIBRARY HAS IN USING THE SYSTEM(S) DESCRIBED IN QUESTIONS (E) THROUGH (L). IF MORE THAN ONE SYSTEM IS EMPLOYED BY THE LIBRARY, INDICATE EACH SYSTEM SEPARATELY. PRIORITY ON THE SYSTEM IS CONSIDERED TO BE THE PRECEDENCE THE LIBRARY HAS IN USING THE SYSTEM (e.g. third priority after accounting and financial aids, first before any other unit may use the system).

____

____

____

V. EQUIPMENT, COMMUNICATIONS, AND RELATED SUPPLIES

A. PLEASE ESTIMATE THE ANNUAL COST EXPECTED DURING THE CURRENT REPORTING YEAR FOR COPYING EQUIPMENT RENTAL, SUPPLIES AND MAINTENANCE USED FOR INTERNAL LIBRARY FUNCTIONS (EXCLUDE COSTS FOR COPYING EQUIPMENT AND SUPPLIES WHICH ARE PATRON REIMBURSED, OR FOR EQUIPMENT FOR PUBLIC USE).

(c46)
$ __________ (11-17)

B. PLEASE ESTIMATE THE ANNUAL COSTS EXPECTED DURING THE CURRENT REPORTING YEAR FOR THE FOLLOWING AREAS OF COMMUNICATIONS AND RELATED EQUIPMENT, SUPPLIES, AND MAINTENANCE COSTS.

1. TELEX (an automatic teleprinter exchange switching service provided by Western Union) equipment rental, maintenance, supplies and communications charges. $ __________ (18-24)
2. TELETYPE EXCHANGE SERVICE, TWX, (an automatic dialed teleprinter exchange switching service provided by Western Union on a commercial toll basis) equipment rental, maintenance, supplies and communication charges. $ __________ (25-31)
3. DATATEL or DATEL (data or high-speed telegraph system coordinated with voice connections) equipment rental, maintenance, supplies and communications charges. $ __________ (32-38)
4. OTHER TELETYPE SERVICE, equipment rental, maintenance, supplies and communications charges. $ __________ (39-45)
5. FACSIMILE (FAX) TRANSMISSION (of pictures, maps, etc.), equipment rental, supplies, maintenance and communications charges. $ __________ (46-52)
6. DATAPHONE (data or high speed telephone system), equipment rental, maintenance, supplies and communication charges. $ __________ (53-59)
7. CRT (CATHODE RAY TUBE) OR REMOTE ACCESS TERMINAL, equipment rental, supplies, maintenance and communication charges providing interactive access to computer via a television-like screen or line printer and keyboard. $__________ (60-66)
8. LINE CHARGES, LEASED LINES, OTHER MEANS OF COMMUNICATIONS TO AUTOMATED SYSTEMS (COMPUTER) NOT INCLUDED IN ABOVE. $ __________ (67-73)
9. TELEPHONE, OTHER THAN ABOVE $ __________ (74-80)
10. OTHER COMMUNICATIONS COSTS EXPECTED (SPECIFY)

(c47)
____________________________ $ __________ (11-17)
____________________________ $ __________ (18-24)
____________________________ $ __________ (25-31)

TOTAL COMMUNICATIONS COSTS $ __________

Initials________

In the following two examples IST means the coded stratum designator and NST indicates the number of libraries in the stratum (IST). The potential user should be aware that other statements in these examples are for space allocations, error control and end of job control. These <u>must</u> be included for the job to run correctly.

```
1...5...10....5...20....5...30....5...40....5...50....5...60....5...
      DIMENSION IP(5)
      REAL*8 D(50)
      COMMON/DICT/D,IP
    1 FORMAT (2I5)
    6 READ(5,1)IST,NST
      IF(IST)4,4,5
    5 CALL DCTSRC(IST)
      K=IP(3)
      IF(K.EQ.19) STOP
C INSERT SUBROUTINE CALL STATEMENTS BETWEEN THESE TWO CARDS


C INSERT SUBROUTINE CALL STATEMENTS BETWEEN THESE TWO CARDS
      GO TO 6
    4 CONTINUE
      END
```

Data Cards are:

```
    1   10
    5   18
```

The data set ends with a blank card.

Or, if you have only one group, the card read can be omitted, as in the following:

```
1...5...10....5...20....5...30....5...40....5...50....5...60....5...
      DIMENSION IP(5)
      REAL*8 D(50)
      COMMON/DICT/D,IP
C INSERT IST AND NST BETWEEN THESE TWO CARDS
      IST=2
      NST=10
C INSERT IST AND NST BETWEEN THESE TWO CARDS
      CALL DCTSRC(IST)
      K=IP(3)
      IF(K.EQ.19) STOP
C INSERT SUBROUTINE CALL STATEMENTS BETWEEN THESE TWO CARDS


C INSERT SUBROUTINE CALL STATEMENTS BETWEEN THESE TWO CARDS
      END
```

See Appendix F for sample deck set ups for an IBM installation. The user should check with someone who is familiar with his/her installation for the exact form of the control cards necessary to run this job.

5.8 Subroutine Description and Calling Statements

In the following descriptions IST stands for the strata calling number (i.e., the specified calling number as described in section 5.7) and NST stands for the number of libraries in the group or stratum. The user should refer to samples of all output tables found in Appendix E.

1. SUBHLD, the subroutine to generate the holdings table (Table I) is called with the statement CALL SUBHLD (IST,NST). This subroutine uses information in cards 2-11 (from page 4 of Form #2).
2. SUBSTF is the subroutine to generate tables on staffing, either Table II, staffing for the entire library, or Table B for individual departments. The statement CALL SUBSTF (IST,NST,i) is used, where i is a single digit number 1 to 7, that coincides with the column in which the information is recorded on page 6 of Form #2. For example, a CALL SUBSTF (IST,NST,1) produces the Table II series for the entire library while CALL SUBSTF (IST,NST,3) produces the Table VIIIB series for the acquisitions department. The tables for the individual departments can also be generated in the departmental subroutines (see subroutines 7, 8, and 9 below).
3. SUBPRC, the subroutine to generate the Table III series on processing and reference support and Table IV on computer systems used within the library, from the data provided on pages 8 through 12 (of Form #2) is called with CALL SUBPRC (IST,NST).
4. SBEQCM, the subroutine to summarize the data on equipment and communications (from page 13, Form #2) into a single table is called with the statement CALL SBEQCM (IST,NST).
5. SUBBDG, is the general budget profile subroutine which generates the Tables VI and VI A for the whole library and the series of A:Budget Profile tables for the individual departments. The statement CALL SUBBDG (IST,NST,i), where i is the number of the column in which the data appear on pages 14 and 15, accesses this subroutine. For example, CALL SUBBDG (IST,NST,1) produces the Tables VI and VI A, while CALL SUBBDG (IST,NST,4) produces the Table IX A series for the cataloging department. As with the staffing subroutine, the departmental budget profile can also be produced in the subroutines for individual departments (see 7, 8, 9 below).
6. SUBRGN is the subroutine which generates the series of tables VII A through VII E, summarizing the data on regional services from pages 16 to 20 of Form #2. The statement CALL SUBRGN (IST,NST) calls this subroutine and generates the five tables for regional libraries.

7. SUBACQ is a three-part subroutine which profiles the acquisitions department. SUBACQ is called with CALL SUBACQ (IST,NST,i) where i = 1 or 2. If i = 1, i.e., CALL SUBACQ (IST, NST,1), the entire profile is produced including Table VIII A budget and Table VIII B, Staffing and Table VIII C. If i = 2, only Table C, Ordering Patterns, is produced.

8. SUBCAT, called with CALL SUBCAT (IST,NST,i) where i is 1 or 2, as in 7 above, produces the series of 3 cataloging profile tables IX-A, budget profile, IX-B, staffing and salary expenditures, and IX-C, cataloging patterns.

9. SUBILL, as in both 7 and 8 above is called with CALL SUBILL (IST, NST, i). SUBILL can produce the entire series of inter-library loan profile tables, including budget (table X-A), staffing (table X-B) and volume (table X-C). If i = 1 the subroutine in turn calls both SUBBDG and SUBSTF to produce table X-A and X-B, in addition to producing Table X-C through X-L. If i = 2, then only Tables X-C through X-L are produced.

10. SUBADM produces the two tables XI, budget (A) and staffing (B) for administrative department overhead with CALL SUBADM (IST, NST).

The reader is reminded that call statements (e.g., CALL SUB_____) must begin in column 7.

THE INTERLIBRARY LOAN SURVEY

6.1 Introduction

The interlibrary loan survey is based upon two instruments, one to monitor borrowing requests (Form #8) and the other to monitor lending requests (Form #9). As with the other instruments used in these studies, forms #8 and #9 are coded for keypunching directly from the form. Where the requested information is the same on the two forms, both borrowing and lending, data are punched into the same columns. The only differences between ILL survey instruments used by the case study libraries and those instruments used by other libraries (Forms #8a and #9a) in the survey, was the additional staff time spent on ILL tasks (e.g., verification of the request) at the end of the instruments required for the case studies. If the user wishes to analyze these tasks on Forms #8 and #9, the same methodology as that employed in activity sheets (Section 4) should be used. The user should make the necessary format changes to adjust Forms #8 and #9 task data to activity sheet specifications.

Since WILCO surveyed libraries of varied size and type, participating libraries were asked to sample their interlibrary loan activity. This sampling measure necessitated a weighting structure corresponding to the sampling interval. The sampling intervals vary from every transaction to only one transaction in twenty.

Due to the availability of excellent systems for the statistical evaluation of a survey of this type (e.g., SPSS and OSIRIS), it was felt unnecessary to develop original programs for this analysis. OSIRIS, a system of canned packages developed by the University of Michigan, was available through the IBM system used for these studies and used for analysis of the survey.

In the interlibrary loan survey, we maintained the divisions of libraries according to type and size, since borrowing and lending characteristics differ widely according to these variables. The reader should refer to section 5.3 for the method of stratification of libraries employed in these studies.

Section 6.2 describes the keypunching procedures and section 6.3 contains a suggested list of tables that the reader may wish to generate using one of the statistical systems available on the market.

6.2 Keypunching and Data Preparation Procedures

Similar to the format of keypunched cards for other forms employed in these studies, the first ten columns are reserved for identification useful to both the user and the computer system. The following table specifies the data required in each of these ten columns.

Table 6-1. Format of the First Ten Columns

Col #	Explanation
1	form number, either 8 or 9
2,3	blank
4,5	the sampling interval (e.g., 1, 3, 5, etc.)
6	blank
7, 8, 9	library number
10	blank

On the instruments, the date of patron request or date request received (18-22) and the date of disposition (23-26) were allocated 4 columns. Each was punched as mmdd (i.e., two digits for the month and two for the day, so that May 24, 1976 would be punched 0524). The publication date (item I-B on both forms) is allocated 8 columns, and is punched mmddyyyy. The same date exampled above would be punched 05241976 in columns 28 through 35. The obvious reason for the use of four digits to indicate year of publication is to distinguish pre-twentieth century publications.

On the lender's transaction log (Form #9), item III, on re-verification can be placed in any of three columns: 48 , 49, or 50. The user should be consistent in the use of the column number that he/she chooses. The remaining columns should be punched according to the specified column numbers appearing on the form.

6.3 Tables Generated for These Studies That Might be of Interest

The user can choose from a wide variety of possible correlations obtainable from the data on the forms. Obviously, the list of possible correlations is lengthy. For the interlibrary loan survey, we found that the following list of univariate and bivariate tables were useful in analyzing the data:

FOR BOTH BORROWING AND LENDING TRANSACTION LOGS

Type of publication: by publication date; by language; by reason for this type of agency; by type of agency (requester or lender); by verification tool; by form of loan requested or loaned; by fill rate.

Publication date: by all of the above; by call number classification range.

Language: by call number classification; by reason for choice of agency; by type of agency (requester or lender); by verification tool; by fill rate.

Borrower or lender type: by location; by fill rate; by communication employed; by time lag.

Delivery method: by location of agency (borrower or lender).

FOR BORROWING TRANSACTION LOGS ONLY (Form #8)

Reason for choice of agency: by type of library material requested; by fill rate; by verification tool.

Verification tool: by fill rate.

Re-requested: by time lag.

Location: by time lag.

FOR LENDERS TRANSACTION LOGS ONLY (Form #9)

Segregate results by regional/non-regional requests.

Verification (yes/no/unknown) by requesting library type.

Reason for non-fill: by type of requesting library.

Disposition of request: by type of library.

APPENDIX A

Publications List and Availability Statement

REFERENCES AND BIBLIOGRAPHY OF WILCO PUBLICATIONS

Publications listed below with a price and WICHE catalog number may be ordered, pre-paid, from Publications Unit, WICHE, P.O. Drawer P, Boulder, Colorado 80302. Other items may be requested from WILCO at the same address; items followed by an asterisk are not stocked, and Xerox copies at $.10 per page will be furnished upon request.

1. A Proposal for Design and Development of a Western Interstate Bibliographic Network. Western Interstate Commission for Higher Education (WICHE), Boulder, Colorado, March 21, 1975, 88p. (*)

2. Initiating the Design and Development of a Western Interstate Bibliographic Network. WICHE, Boulder, Colorado:
   First Quarterly Report, July-September 1975. December 15, 1975, 83p.
   Second Quarterly Report, October-December 1975. February 25, 1976, 54p.
   Third Quarterly Report, January-March 1976. May 31, 1976, 85p.
   Fourth (Final) Quarterly Report, April-August 1976, October 22, 1976,125p. (Cat. #2B136, $3.50)

3. Pearson, K. M. and the Project Staff. A Review of Potential Components for the Western Bibliographic Network, WICHE, March 5, 1976, 72 p. (Catalog #2B121, $2.50)

4. WILCO Newsletter. (Formerly Western Network Newsletter.) WILCO, WICHE, Boulder, Colorado. Number 1-

5. Assessing the Impact of On-Line Access to Location Data on Interlibrary Loan Patterns. WICHE, Boulder, Colorado, 5 January 1976, 67p.(*)

6. Minutes of the Western Network Project Organizing Steering Committee Meeting, Boise, Idaho, February 2-3, 1976, WICHE, February 18, 1976. (*)

7. Pearson, Karl M., Jr. Survey of Union Serials Data Bases in the West. WILCO, WICHE, Boulder, Colorado, 30 September 1976, 8 p. (N-16/000/02).(*)

8. Butler, Brett. Discussion Report: WICHE "Western Networks" Meeting, Denver, Colorado, March 203, 1976. Butler Associates/R&D Consultants, Los Altos, California, March 16, 1976, 12 p. (*)

9. Montague, Eleanor A. et al. Western Interstate Cooperative Bibliographic Network Alternatives for Action. WICHE, Boulder, Colorado, March 1976, 66 p. (Draft working paper; limited distribution.)

10. A Proposal for Facilitating Equitable Interstate Sharing of Library Resources in the West. WICHE, Boulder, Colorado, March 31, 1976, 57p.(*)

11. Duggan, Maryann. The WICHE Project for Continuing Education of Library Personnel: An Analytical Summary of the Past and Alternatives for the Future. WICHE, Boulder, Colorado,March 1976, 67p. (working paper, limited distribution)

12. Gassler, Scott. Economic Issues in the Networking of Library Technical Support Services. WICHE, Boulder, Colorado, October 1976, 20p.(Cat. #2B131, $1.50)

13. Library Networking in the West: The Next Three Years. WILCO, WICHE, September 1976, 19p. (Fifth Draft) (Cat. #2B127)

14. Telecommunications and Message Processing for Library Networking: A System Concept and Proposal Outlines. WILCO, WICHE, July 7, 1976, 12 p. (*)

15. Survey of Costs in Technical Processing and Interlibrary Loan -- Survey Tables and Cast Studies Results (Cat. #2B129, $not set yet)

16. Survey of Costs in Technical Processing and Interlibrary Loan -- Summary (Cat. #2B130, $not set yet)

17. Librarian's Handbook for Costing Network Services (Cat. #2B134, $not set yet)

18. Costs in Technical Processing and Interlibrary Loan -- Data Processing Users Manual (Cat. #2B133, $not set yet)

19. Final Report of the Project "Conducting Cost and Funding Studies Concerning Development and Implementation of Western Interstate Bibliographic Network" (Cat.#2B132, $not set yet)

The potential user who wishes copies of the programs for the analysis of the survey data should contact the WICHE Publications Unit, P.O. Drawer P., Boulder, Colorado 80302 for availability and cost information.

APPENDIX B

DEFINITION OF TERMS AND MATHEMATICAL FORMULAE

Alphabetic Codes: Codes containing any letters from the alphabet.

Alphanumeric Codes: Codes containing alphabetic and numeric characters.

Average (Arithmetic Mean): the number obtained by dividing the sum of a set of numbers by the number of elements in the set.

Bivariate Analysis: the analysis of the dynamic relationship between two variables (i.e., to what degree (if any) do two variables change with respect to one another). An analysis of the joint distribution of two variables. For example, the analysis of library funding with respect to inflation.

Blank: code used to indicate missing data; a blank column is one that contains no punch. Indicated in this text as b̸.

Call Statement: A program statement which transfers control of the program to a subprogram. This subprogram returns control of the program to the next statement of the main body of the program when it is finished (usually indicated by a RETURN statement.)

Card: A data storage medium which is used to enter information into a computer by means of a series of holes punched into it. The standard punched card is 7 3/8 inches (18.7cm) wide and 3 1/4 inches (8.2cm) high and contains 80 columns for information.

Card Number: Code used when there is more than one card of input to indicate the sequence of input.

Character: One numeric digit, alphabetic character, or punctuation mark.

Column: One of 80 vertical sections (positions) of a punched card. Each column may contain a single character, e.g., a 1 is a 1 punch in a column.

Data: Numerical information in a form appropriate for processing by the computer.

Data element: A single piece of numerical information. For example, 26 would represent a data element, however 2, and 6, would represent two data elements.

Data Set: The set of all data elements which logically belong together and are ready to input to the computer.

Deck: A set of punched cards.

Dictionary: A list of words or partial words, or sets of words which are combined to form sentences, phrases or other words for output or for identification of output (e.g., table titles, column headers on printed output). The dictionary simplifies PRINT statements within the program. It is often more efficient to have the system write words numbered 5, 7, 10, 20 on line one, and words numbered 5, 6, 8, 11, 21 on line two, than to have commands within the program for the system to write:

"the quick brown fox," and

"jumped over the lazy dog."

Disk: A data storage medium, similar to tape in terms of usage.

Field: a single column or a series of columns on a punched card which specifies a single data element. The field of columns 16-20 contains 5 columns, 16, 17, 18, 19, and 20.

FORTRAN: (FORmula TRANslator). The name given to a system which translates formulae into the computer's language. One of the oldest and best standardized (ANS-American National Standard) languages in the computer business. All FORTRAN statements must start in column 7. Programs written in ANS (American National Standard) FORTRAN are generally portable between systems from the same manufacturer and between machines from different manufacturers.

ID Number: The unique identifying number for every respondent (library or employee) for which there are data needs.

Input: The set of data or information which is fed to the computer for processing.

Input Stream: The ordering of the input to a computer system. For example, card 11 comes before card 12. That is, the deck of input information, in the appropriate order which the computer must (or expects) to read data.

JCL: Job control language, usually used in system control statements at the beginning and end of programs; Each machine usually has a unique JCL.

Job: A computer run, including programs and data which produces output.

Keypunch: A machine to punch (or prepare) cards for input. The keyboard of the machine resembles a typewriter, and by striking a key, the machine produces the appropriate holes in the card for the computer to "read" the character of number as reflected on the key. Also, the process of punching data onto cards.

Output: The set of data which the computer produces by processing or massaging the the input; the results obtained from the running of a program. In this system all output is printed.

Print-Out: Output on paper.

Program: A series of statements to instruct the computer to perform manipulations on input and produce output.

Punch: The square holes on a computer card designating numeric and alphabetic codes in each column of card; the process of keypunching.

Right Justified: Information (data) is placed as far to the right in the allocated field as possible. That is, if the allocated field is (16-20), the number 26 is punched ƀƀƀ26 (where ƀ means a blank column) and not ƀ26ƀƀ (which would be read as 2600).

Standard Deviation: A statistical measure equal to the square root of the variance. The variance is the sum of the squares of the differences of observations from the mean. The standard deviation indicates a relative closeness of the set of data to the mean. A large standard deviation relative to the magnitude of the arithmetic mean implies that the data are not grouped near the mean.

Subprogram: See subroutine.

Subroutine: A program which is called from another program or subprogram. All data and statements are independent from the calling program. Control of the flow of the processing of the data is transferred to the subroutine through the "CALL" statements, and data are passed through allocated blocks of data storage "common" to both programs.

System: A series of connected programs to process data and produce output. The difference between a system and a series of programs is that with the system the user is able to select the output he/she desires and to some extent the input he/she intends to provide, while with a program the user is confined to the specified input and the specified output.

Tape: A data storage medium for the computer.

Univariate Analysis: The analysis of the responses to a single question. That is, an analysis of the distribution of a single variable over all observations.

Verification: The process of checking punched cards (or tape) for accuracy.

MATHEMATICAL FORMULAE

Average (mean) of i elements of weight f_i

$$\bar{X} = \frac{\sum f_i x_i}{\sum f_i}$$

Standard Deviation , of i elements of weight f_i, with mean $\bar{x}$

$$\mu_2 = \frac{\sum f_i (x_i - \bar{x})^2}{\sum f_i}$$

Holdings Growth

$$\Delta H = \frac{\sum_{i=2}^{4} HLD_i - HLD_{i-1}}{\sum_{i=2}^{4} HLD_i} \quad \text{where } HLD_i = \text{non-zero for year } i$$

Average Salary per FTE

$$SF = \frac{\sum \text{salaries}}{\sum \text{FTE}} \left\{ \begin{array}{l} \text{for each employee grouping,} \\ \text{for total library and/or each department} \end{array} \right.$$

Percent of budget allocated to____(any department)

$$PB = \frac{\text{department budget}}{\text{total library budget}} \times 100$$

Annual budget expenditure per throughput

$$EPT = \frac{\text{department expenditure last reporting year}}{\text{department items processed last reporting year}}$$

Hourly cost (for those employees on annual salary)

$$HC = \frac{AS(1+FB)}{(2080 - 8 \times DZOF - SAB) \times K \times K'}$$

Where AS = annual salary
FB = fringe benefit rate as stated/100
DZOF = total paid holidays annually
SAB = days of sabbatical accrued annually
K = fraction of week worked if less than 40 hours
K′ = fraction of year worked if less than 12 months

Hourly cost (for those employees that receive hourly wages)

$$HC = HW\,(1+FB)$$

Where HW = hourly wages as stated and FB = fringe benefit rate as stated/100

APPENDIX C

SAMPLES OF REVISED PAGES

III. STAFF (CONT'D)

PLEASE INDICATE IN THE FOLLOWING TABLE, THE FULL-TIME EQUIVALENCIES IN EACH CATEGORY. PLEASE INCLUDE OPEN POSITIONS AS WELL. ALSO FOR EACH CATEGORY, INDICATE THE TOTAL ANNUAL SALARY EXPENDITURE, EXCLUDING FRINGE BENEFITS. INCLUDE OPEN POSITIONS IN SALARY CALCULATIONS ALSO. NOTE THAT SALARY EXPENDITURES SHOULD CORRESPOND TO THE NUMBER OF FULL-TIME EQUIVALENCES (FTE) IN EACH CATEGORY.

	A. TOTAL LIBRARY (11-20)	B. ADMINISTRATION (21-30)	C. ACQUISITIONS DEPARTMENT (31-40)	D. CATALOGING DEPARTMENT (41-50)	E. SERIALS DEPARTMENT (51-60)	F. INTERLIBRARY LOAN DEPARTMENT (61-70)	G. MATERIALS FINISHING (71-80)	H. ALL OTHER	
FULL-TIME EQUIVALENCIES(FTE)									
1. Professional librarian									(c13)
2. Other professional									(c14)
3. Library assistant									(c15)
4. Clerks									(c16)
5. Student assistant/page									(c17)
6. Other (excluding staff involved in plant maintenance)									(c18)
Subtotal of staff paid by library									
7. Staff paid by outside sources									(c19)
8. Volunteers									(c20)
Total FTE									
SALARIES									
9. Professional librarian	$	$	$	$	$	$	$	$	(c21)
10. Other professional	$	$	$	$	$	$	$	$	(c22)
11. Library assistant	$	$	$	$	$	$	$	$	(c23)
12. Clerks	$	$	$	$	$	$	$	$	(c24)
13. Student assistant/page	$	$	$	$	$	$	$	$	(c25)
14. Other (excluding staff involved in plant maintenance)	$	$	$	$	$	$	$	$	(c26)
Total salaries paid by the library	$	$	$	$	$	$	$	$	(c27)

III. STAFF (CONT'D)

I. PLEASE INDICATE BELOW THE STAFF BENEFIT RATE (PERCENT OF SALARY) GIVEN TO EMPLOYEES IN EACH OF THE FOLLOWING CATEGORIES: (c28)

1. Professional librarian ________% (11-14)
2. Other professional ________% (15-18)
3. Library assistant ________% (19-22)
4. Clerks ________% (23-26)
5. Student assistant/page ________% (27-30)
6. Other (excluding staff involved in plant maintenance) ________% (31-34)

J. PLEASE INDICATE BELOW THE FULL-TIME EQUIVALENCIES (FTE) PRESENTLY EMPLOYED IN YOUR LIBRARY IN THE FOLLOWING FUNCTIONS OR POSITIONS:

1. Business and financial staff (excluding book fund bookkeepers) ____________ (35-38)
2. Book fund bookkeepers ____________ (39-42)
3. Library planning ____________ (43-46)
4. Library fund raising ____________ (47-50)
5. Systems analysts ____________ (51-54)
6. Programmers ____________ (55-58)

K. PLEASE INDICATE THE AVERAGE SALARY INCREASES GIVEN DURING THE FOLLOWING YEARS BY CATEGORIES OF EMPLOYEE. THIS SHOULD REPRESENT THE COMBINED PERCENTAGE INCREASES OF MERIT AND COST-OF-LIVING INCREASES. PROMOTIONAL INCREASES GIVEN TO EMPLOYEES MOVING INTO NEW POSITIONS SHOULD NOT BE INCLUDED.

(c29)

TYPE OF EMPLOYEE	K. 1974		L. 1975		M. 1976 (est.)	
1. Professional librarian	%	(11-13)	%	(14-16)	%	(17-19)
2. Other professional	%	(20-22)	%	(23-25)	%	(26-28)
3. Library assistants	%	(29-31)	%	(32-34)	%	(35-37)
4. Clerks	%	(38-40)	%	(41-43)	%	(44-46)
5. Student assistant/page	%	(47-49)	%	(50-52)	%	(53-55)
6. Other (excluding staff involved in plant maintenance)	%	(56-58)	%	(59-61)	%	(62-64)

65

66

Initials __________

IV. PROCESSING AND REFERENCE SUPPORT (cont.)

M. PLEASE DESCRIBE THE PRIORITY THE LIBRARY HAS IN USING THE SYSTEM(S) DESCRIBED IN QUESTIONS (E) THROUGH (L). IF MORE THAN ONE SYSTEM IS EMPLOYED BY THE LIBRARY, INDICATE EACH SYSTEM SEPARATELY. PRIORITY ON THE SYSTEM IS CONSIDERED TO BE THE PRECEDENCE THE LIBRARY HAS IN USING THE SYSTEM (e.g. third priority after accounting and financial aids, first before any other unit may use the system).

____

____

____

V. EQUIPMENT, COMMUNICATIONS, AND RELATED SUPPLIES

A. PLEASE ESTIMATE THE ANNUAL COST EXPECTED DURING THE CURRENT REPORTING YEAR FOR COPYING EQUIPMENT RENTAL, SUPPLIES AND MAINTENANCE USED FOR INTERNAL LIBRARY FUNCTIONS (EXCLUDE COSTS FOR COPYING EQUIPMENT AND SUPPLIES WHICH ARE PATRON REIMBURSED, OR FOR EQUIPMENT FOR PUBLIC USE).

(c46)
$ __________ (11-17)

B. PLEASE ESTIMATE THE ANNUAL COSTS EXPECTED DURING THE CURRENT REPORTING YEAR FOR THE FOLLOWING AREAS OF COMMUNICATIONS AND RELATED EQUIPMENT, SUPPLIES, AND MAINTENANCE COSTS.

1. TELEX (an automatic teleprinter exchange switching service provided by Western Union) equipment rental, maintenance, supplies and communications charges. $ __________ (18-24)
2. TELETYPE EXCHANGE SERVICE, TWX, (an automatic dialed teleprinter exchange switching service provided by Western Union on a commercial toll basis) equipment rental, maintenance, supplies and communication charges. $ __________ (25-31)
3. DATATEL or DATEL (data or high-speed telegraph system coordinated with voice connections) equipment rental, maintenance, supplies and communications charges. $ __________ (32-38)
4. OTHER TELETYPE SERVICE, equipment rental, maintenance, supplies and communications charges. $ __________ (39-45)
5. FACSIMILE (FAX) TRANSMISSION (of pictures, maps, etc.), equipment rental, supplies, maintenance and communications charges. $ __________ (46-52)
6. DATAPHONE (data or high speed telephone system), equipment rental, maintenance, supplies and communication charges. $ __________ (53-59)
7. CRT (CATHODE RAY TUBE) OR REMOTE ACCESS TERMINAL, equipment rental, supplies, maintenance and communication charges providing interactive access to computer via a television-like screen or line printer and keyboard. $ __________ (60-66)
8. LINE CHARGES, LEASED LINES, OTHER MEANS OF COMMUNICATIONS TO AUTOMATED SYSTEMS (COMPUTER) NOT INCLUDED IN ABOVE. $ __________ (67-73)
9. TELEPHONE, OTHER THAN ABOVE $ __________ (74-80)
10. OTHER COMMUNICATIONS COSTS EXPECTED (SPECIFY)

(c47)
____________________ $ __________ (11-17)
____________________ $ __________ (18-24)
____________________ $ __________ (25-31)

TOTAL COMMUNICATIONS COSTS $ __________

Initials________

XIII. INTERLIBRARY LOAN (cont.)

EXHIBIT 5-2

W. PLEASE INDICATE BELOW INSTITUTIONS (INCLUDING BIBLIOGRAPHICAL CENTERS) WHICH MOST FREQUENTLY REQUEST MATERIALS FROM YOUR LIBRARY. RANK ACCORDING TO THE NUMBER OF REQUESTS MADE ANNUALLY, IF POSSIBLE. INDICATE THE NUMBER OF REQUESTS RECEIVED BY YOUR LIBRARY FROM THIS LIBRARY OR CENTER DURING THE LAST REPORTING YEAR, IF THIS STATISTIC IS AVAILABLE.

	LIBRARY NAME	LOCATION	NUMBER OF REQUESTS RECEIVED LAST YEAR	(c77)
1.				(11,12)
2.				(13,14)
3.				(15,16)
4.				(17,18)
5.				(19,20)
6.				(21,22)
7.				(23,24)
8.				(25,26)
9.				(27,28)
10.				(29,30)

11. WHAT PERCENT OF THE TOTAL REQUESTS RECEIVED BY YOUR LIBRARY FROM OTHER LIBRARIES (AS ENTERED IN QUESTION (J)) DO THE ABOVE REPRESENT? ________ % (31-33)

X. PLEASE INDICATE BELOW THE TEN SOURCES (INCLUDING BIBLIOGRAPHIC CENTERS) FROM WHICH YOU MOST FREQUENTLY BORROW MATERIALS. RANK ACCORDING TO THE NUMBER OF REQUESTS THAT YOUR LIBRARY MAKES ANNUALLY, IF POSSIBLE. INDICATE THE NUMBER OF REQUESTS MADE OF THIS INSTITUTION DURING THE LAST REPORTING YEAR IF THIS STATISTIC IS AVAILABLE.

	LIBRARY NAME	LOCATION	NUMBER OF REQUESTS MADE LAST YEAR	
1.				(34,35)
2.				(36,37)
3.				(38,39)
4.				(40,41)
5.				(42,43)
6.				(44,45)
7.				(46,47)
8.				(48,49)
9.				(50,51)
10.				(52,53)

11. WHAT PERCENT OF THE TOTAL REQUESTS MADE, AS ENTERED IN QUESTION (C), DO THE ABOVE REPRESENT? ________ % (54-56)

Initials ______

APPENDIX D

SAMPLES OF CORRECTLY PUNCHED DATA

```
1...5...10....5...20....5...30....5...40....5...50....5...60....5...70....5...80....5...90....5..100   RECORD #  LENGTH
20101 410 1    197511967197320706 1 0110010                                                                  1       80
20402 410                                   182991                1099                                       2       80
20403 410                                   209450                1404                                       3       80
20404 410                                   186982                1611                                       4       80
20405 410                                   222049                1697                                       5       80
20406 410                                   243928                1797                                       6       80
20407 410     614617                                                                                         7       80
20408 410     621875                                                                                         8       80
20409 410     639186                                                                                         9       80
2 410 410     676387                                                                                        10       80
2 411 410     693387                       98  100                                                          11       80
20412 410       770012    1                                                                                 12       80
20613 514       58.1      2.25       .10      4.10         1       .05       .10                            13       80
20614 514          2      1.95       .05                                                                    14       80
20615 514       35.7                   1         2       .75                                                15       80
20616 514      48.95      6.05      2.95         7      1.25         1      3.75                            16       80
20617 514      37.85                 .25        .5                                                          17       80
20618 514                                                                                                   18       80
20619 514         55         1                   2                                                          19       80
20620 514         12                            .5                                                          20       80
20621 514     879197     50550      1932     61380     13716       539      1818                            21       80
20622 514      33288     32704       584                                                                    22       80
20623 514     392096               10596     21192      7947                                                23       80
20624 514     451817     56702     27514     64812     11865      9486     33750                            24       80
20625 514     284783                1881      3762                                                          25       80
20626 514                                                                                                   26       80
20627 514    2041182    139955     42508    151146     33528     10025     35568                            27       80
20728 514   16  16  16  16  16       6   1   3                                                              28       80
20729 514 6.69.66.25.15.36.27.07.56.27.58.56.27.56.86.2                                                     29       80
31430 002 1                                    11746    -1  3500     -1                                     30       80
31431 002 12000     -1                                      52      -1                                      31       80
31432 002    12     -1    0      0            35000     -131000     -1                                      32       80
31533 002 99999     -1                        99999     -1 3000     -1                                      33       80
31534 002                12     -1                                                                          34       80
31535 002              1850     -1  317      0  239     -1   31     -1                                      35       80
31536 002   183     -1                                                                                      36       80
31537 002  3500   1043  720      0  247  11679                                                              37       80
31638 002                                     20000     -1                                                  38       80
31639 002     9     -1                                                                                      39       80
31640 002                                                                                                   40       80
31641 002                          1540      0                                                              41       80
31642 002   540   4220    0      0 6120      0  360    282    4     72                                      42       80
31643 002                                                                                                   43       80
31744 002                         211      1  2        0    11468                                           44       80
31845 002                                                          13                                       45       80
31946 002    5000          850                              37560         11318                             46       80
31947 002                                                                                                   47       80
32248 101       3900     30000     16000      2530                 500     17000                            48       80
32249 1011    641962    147097    198490                         57945                                      49       80
32250 101                                                                                                   50       80
32251 101      25999      2976      3925                          2720                                      51       80
32252 101      13000      3348      1650                          2880                                      52       80
32253 101      22100      2976      3400                         10400                                      53       80
32254 101      11435      2750      3500                          1600                                      54       80
32255 101      26425     10104      6309                          1476                                      55       80
32356 101      34730     28656     14263      2250               15600      2931                            56       80
1...5...10....5...20....5...30....5...40....5...50....5...60....5...70....5...80....5...90....5..100   RECORD #  LENGTH
```

```
1...5...10....5...20....5...30....5...40....5...50....5...60....5...70....5...80....5...90....5..100  RECORD #  LENGTH
32357 102     246378     42265      6032     12742      6519     22920      9634                            57       80
32358 102                                                                                                   58       80
32359 102       8500                                              8500                                      59       80
32360 102       6000                                                                                        60       80
32361 102      16222                                              1920                                      61       80
32362 102      28020                                                                                        62       80
32363 102      55800                                                                                        63       80
32464 301 111 4     311 111 111  111  1 1     188470 51310 0 0 2 0                                          64       80
32665 301 1   7        70000  50000     70000 1                                                             65       80
32766 301 1                  247189                                                                         66       80
32767 301  099                                                                                              67       80
32968 301               23562 1  99 1 0 0 1    11183     419       0  10 088 2 4                            68       80
33069 301     25  7  5   2   1884   1884104020 4 51214412  5954   637                                       69       80
33370 301                 1600      1600                 500       500                                      70       80
33371 301        200                 200       137                 137                                      71       80
33372 301         30                  30                                                                    72       80
33373 301                                                                                                   73       80
33374 301         14                  14                                                                    74       80
33375 301                                                                                                   75       80
33376 301                           1844                           637                                      76       80
33477 301 2273426161           907322426161           90                                                    77       80

......77 READ & ......77 WRITTEN..DOTS-EOJ.. COND CODE=0000
```

```
1...5...10....5...20....5...30....5...40....5...50....5...60....5...70....5...80....5...90....5..100   RECORD #  LENGTH
7     201  0001    5   80   12                                                                                1      80
7     201  0001    6  120   25                                                                                2      80
7     201  0001    7   75   25                                                                                3      80
7     201  0001    9  240   25                                                                                4      80
7     201  0001   10  100   15                                                                                5      80
7     201  0001   11  200   50                                                                                6      80
7     201  0001   14   20    2                                                                                7      80
7     201  0001   16   30    3                                                                                8      80
7     201  0001   17   20   25                                                                                9      80
7     201  0001   20   60   12                                                                               10      80
7     201  0001   21  300   40                                                                               11      80
7     201  0001   22   35    7                                                                               12      80
7     201  0001   23  320   30                                                                               13      80
7     201  0001   25  470   35                                                                               14      80
7     201  0001   26   25   25                                                                               15      80
7     201  0001   27   70   20                                                                               16      80
7     201  0001   28  270   35                                                                               17      80
7     201  0001   30   20    3                                                                               18      80
7     201  0001   31   40   10                                                                               19      80
7     201  0001   33  305   60                                                                               20      80
7     201  0001   34  220                                                                                    21      80
7     201  0001   35  150                                                                                    22      80
7     201  0002    1   40   60                                                                               23      80
7     201  0002    2   10    2                                                                               24      80
7     201  0002    4   50   55                                                                               25      80
7     201  0002    5   30   30                                                                               26      80
7     201  0002    6   45   32                                                                               27      80
7     201  0002   10   20    2                                                                               28      80
7     201  0002   11  115   61                                                                               29      80
                                                                                                             30      80
                                                                                                             31      80
                                                                                                             32      80
                                                                                                             33      80
                                                                                                             34      80
80005 009      155052806022    19531      211 4135312                                                        35      80
80005 009      165052806224    18701      212 315111                                                         36      80
80005 009      170052806284    18511      212 315111                                                         37      80
80005 009      115052606104        1180   212 211111                                                         38      80
80005 009      105052406234    19561180   212 211111                                                         39      80
80005 009      190052806112    19711      212 315111                                                         40      80
80005 009      195052806112    19752      562 215311                                                         41      80
80005 009      175052606172    19701      212 315111                                                         42      80
80005 009      150052706102    19717      462 215311                                                         43      80
80005 009      135052606102    19751      3262 315111                                                        44      80
80005 009      140052606012    19671      3262 315111                                                        45      80
80005 009      130052606102    19751      3262 315111                                                        46      80
80005 009      120052506092    19751180   212 211111                                                         47      80
80005 009      110052806102    19681180   212 211111                                                         48      80
80005 009      100052105272    195510175  2114415312                                                         49      80
80005 009      145052706101    19751      462 215311                                                         50      80
80005 009      160052806229    193419794  212 315111                                                         51      80
80005 009      180052806103    19701      212 315111                                                         52      80
80005 009      185062807103    19691      212 315111                                                         53      80
80005 009      125052806173    19711      3262 315111                                                        54      80
                                                                                                             55      80
                                                                                                             56      80
1.       0....5...20....5...30....5...40....5...50....5...60....5...70....5...80....5...90....5..100   RECORD #  LENGTH
```

```
1...5...10....5...20....5...30....5...40....5...50....5...60....5...70....5...80....5...90....5..100   RECORD #  LENGTH
                                                                                                              57      80
                                                                                                              58      80
                                                                                                              59      80
90020 011     405 071607202   19751        2 422  35                                                          60      80
90020 011     109 070907092   19721        6 23     27                                                        61      80
90020 011     229 070907092   19754        2 132  3627                                                        62      80
90020 011     725 071307162   19761        1 132  36                                                          63      80
90020 011     468 071607162   19671        2 132  35                                                          64      80
90020 011      37 071507162   19751        1 222  36                                                          65      80
90020 011     871 071407164   19741        2 132  35                                                          66      80
90020 011     384 071607162   19691        2 232  35                                                          67      80
90020 011     701 071607162   19743        2 132  35                                                          68      80
90020 011     157 071507162   19731        2 132  36                                                          69      80
90020 011     194 071507199       2        2 131     5                                                        70      80
90020 011     654 071907192   19751        1 242  36                                                          71      80
90020 011     563 071607192   19751        2 232  35                                                          72      80
90020 011     112 071407264       2        2 232    56                                                        73      80
90020 011     586 071207124   19741        2 232    26                                                        74      80
90020 011     783 071907232   19771        2 332  35                                                          75      80
90020 011     449 071607222   19751        2 332  35                                                          76      80
90020 011     292 071507224   19741        2 232  35                                                          77      80
90020 011     168 072007222   19651        2 132  35                                                          78      80
90020 011     341 071507162   19631        2 132  35                                                          79      80
90020 011     115 071507162   19673        2 132  35                                                          80      80
90020 011     458 071007162   1975         2 232  35                                                          81      80
90020 011     257 071507162   19741        2 232  35                                                          82      80
90020 011     831 071407204   19541        2 132  15                                                          83      80
90020 011      74 071407162   19112        1 242    27                                                        84      80
90020 011     920 072007232   19651        2 132  35                                                          85      80
90020 011     419 071607262   19711        2 432    57                                                        86      80
90020 011     595 071207162   19751        1 422    57                                                        87      80
90020 011      39 071407162       1        2 322    26                                                        88      80
90020 011    2000 071407261   19491        1 422    57                                                        89      80
90020 011     972 071407204   19751        2 132  16                                                          90      80
90020 011     635 071907202   19751        2 132  36                                                          91      80
90020 011     969 072007203   19621        2 432    56                                                        92      80

......92 READ & ......92 WRITTEN..DOTS-EOJ.. COND CODE=0000
```

APPENDIX E

TABLES GENERATED FROM THE SURVEY INSTRUMENT DATA

Data derived from the survey of costs and the case studies have been compiled by stratum, in the *Survey of Costs in Technical Processing and Interlibrary Loan -- Survey Tables and Case Study Results*. Included in this appendix is a sample of each table generated from the survey data with the use of the system described in Section 5 of this manual. The user is advised to scan the tables and the descriptions below as selected tables may only be applicable or desired. Section 5 also describes procedures for the generation of these tables and specifies the input data used in producing the output tables. It may be appropriate for the user to exclude certain sets of data collection, if resulting tables are not being considered for generation.

Output tables for the survey data consist of:

Table I: *Holdings Distribution*: Title and volume counts according to type of publication (bookstock, bound periodicals, microform, printed government documents and audio/visual materials) are examined. Also included is the volume to title ratio observed for bookstock and bound periodicals.

Table II: *Staffing Distribution*: The number of employees, and salaries by type of employee (professional Librarian, other professional, library assistant, clerk, student/page, other paid employee, staff paid by outside sources and volunteers) are displayed. Fringe benefit rates are also displayed.

Table III: *Processing and Reference Support*: An in-depth examination of library activities supported, or products purchased from outside suppliers for the purposes of more efficient use of resources, cost-effectiveness or support, including the cost

and volume processed or purchased annually. Support services include pre-processing, automated cataloging systems, printed card sets and automated buying.

Table IV: Unique Computer Support: A table of self-contained support systems developed exclusively for the library by contract and used exclusively by the library or parent institution, or an automated system developed for the library in-house by library staff or staff from the parent organization, are analyzed by function, developmental and annual maintenance costs. These systems often support several functions; however, in presentation only the first function supported is indicated.

Table V: Equipment and Communications Costs: The annual costs for copying, TELEX, TWX, Datatel, other teletype communications, facsimile transmission, dataphone, remote access terminals, lines to a computer center and telephone are displayed.

Table VI: Budget and Expenditure Patterns: A summary of the current year budget, and the related increases (or decreases) over last year's expenditures are included. Budget categories include capital expenditures, materials budgets, and operating budgets.

Table VI-A: Budget and Expenditure Patterns: Departmental Allocations: Four separate tables indicating the percent of budget allocated to adminstration, acquisitions, cataloging, serials, interlibrary loan and materials finishing by budget category.

Table VII-A: Regional Library Summary--Services Provided by Regional Libraries: A table indicating the number of libraries providing regional support to other libraries in the region by type of support service.

Table VII-B: Regional Library Summary--Types of Libraries Supported: The types of libraries (public, academic, school, special) in the region supported by participants, and the number of libraries supported.

Table VII-C: Regional Library Summary--Regional Interlibrary Loan: A synopsis of interlibrary loan handled through regional centers, including volume, fill rate, percentage filled within the library, from another library in the region, forwarded to the state library, another library outside the region, bibliographic center, or returned to the requestor with location information or unfilled.

Table VII-D: Regional Library Summary: Regional Catalog Maintenance: An overview of the type of union catalog or list maintained by regional center participants, including types of materials, titles held and added annually, locations and average locations per title, and the age of the catalog.

Table VII-E: Regional Library Summary--Reimbursement: A table indicating the amount, type and source of reimbursement (if any) received by regional libraries.

Table VIII-A: Acquisitions Department--Budget Profile: Two tables indicating acquisitions operating budgets and related cost per volume throughput examined by budget category. Increase over last year's expenditures are also examined.

Table VIII-B: Acquisitions Department--Staffing and Salary Expenditures: A two-page summary of staffing patterns within acquisitions, including salary expenditures and average salaries by type of employee.

Table VIII-C: Acquisitions Department--Ordering Patterns: Types of materials are examined, along with types of ordering performed (standing order, approval plans, order requests, gift exchange). Additionally, the year of imprint of materials expected to be ordered during the current year, percent of acquisitions for serial backfile supplement and monograph retrospective collection development are examined.

Table IX-A: Cataloging Department--Budget Profile: A two-page summary of the budget for the current year, and resulting cost per throughput within the cataloging department by budget category, along with increases by budget category.

Table IX-B: Cataloging Department--Staffing and Salary Expenditures: A summary of staffing patterns within cataloging department, title throughput per cataloging FTE, and related cataloging salary costs per throughput.

Table IX-C: Cataloging Department--Cataloging Patterns: An overview of the types of materials cataloged annually, the cataloging source used, lag times, backlog, and cards per record entry. Proof slip subscriptions are also examined.

Table X-A: Interlibrary Loan Department--Budget Profile: Two tables indicating departmental budget, and increases (or decreases) over previous year budgets, along with expenditures per request throughput (both borrowing and lending).

Table X-B: Interlibrary Loan Department--Staffing and Salary Expenditures: A two-page summary of staffing patterns within interlibrary loan, including salary expenditures, average salaries by type of employee, volume and average salary cost per request (both borrowing and lending).

Table X-C: Interlibrary Loan Department--Volume of Borrowing Requests: A summary of ILL borrowing requests, including fill rate, percent filled locally (a designation made by the participant to indicate geographical proximity for which interlibrary loan turnaround was lowest) and percent filled within the state of the participant.

Table X-D: Interlibrary Loan--Number of Institutions Typically Queried: A synopsis of the number of libraries typically queried by respondents prior to a completed (filled or discontinued) request, indicating the mean and mode.

Table X-E: Interlibrary Loan Department--Time Required to Fill a Request: A summary of the typical lag time of requests to completion through a bibliographic center, a local library, elsewhere in state, in adjoining states and elsewhere in the country.

Table X-F: Interlibrary Loan Department--Verification Policies: A summary of the libraries reporting verification of borrowing and lending requests.

Table X-G: Interlibrary Loan Department--Frequency of Borrowers Table: A summary by type of library of the ten most frequent borrowers of materials from respondents, and observed ranks of these types of libraries.

Table X-H: Interlibrary Loan Department--Frequency of Lenders Table: A summary by type of library of the ten most frequent lenders of materials to respondents and the observed ranks of these types of libraries.

Table X-I: Interlibrary Loan Department--Location of Borrowers Table: A summary by location (local, elsewhere in state, adjoining states, other western states, elsewhere) of the ten most frequent borrowers of materials cited by respondents, and the observed ranks of these locations.

Table X-J: Interlibrary Loan Department--Location of Lenders Table: A summary by location (local, elsewhere in state, adjoining states, other western states, and elsewhere) of the ten most frequent lenders of materials to participants cited by respondents, and the observed ranks of these locations.

Table X-K: Interlibrary Loan Department--Characteristics of Filled Borrowing Requests: A two-page report of volume of requests filled from the participating library collection by type of materials, and percentage loaned in original or duplicate form.

Table X-L: Interlibrary Loan Department--Characteristics of Filled Lending Requests: A two-page summary of requests lent to the participating library by type of materials, form of loan and volume of filled requests.

Table XI-A: Administration Department Budget Profile: Two tables indicating departmental operating budget for administration, and increases (or decreases) over previous year's expenditures, along with a summary of last year's expenditures in administration.

Table XI-B: Administration Department--Staffing and Salary Expenditures: Two tables summarizing staffing patterns within library administration by type of employee, and indicating salary expenditures, and salary expenditures per total library staff.

A: SURVEY OF 100 LIBRARIES. LARGE ACADEMIC STRATUM

TABLE I: HOLDINGS DISTRIBUTION
10 LIBRARIES INCLUDED

TYPE OF PUBLICATION	NUMBER OF LIBRARIES REPORTING	TITLES					NUMBER OF LIBRARIES REPORTING	VOLUMES				
		AVERAGE	LOW	HIGH	STD DEV	GROWTH		AVERAGE	LOW	HIGH	STD DEV	GROWTH
BOOKSTOCK	8	744104	378750	980000	177951.	0.06	10	1290306	473437	2040000	477456.	0.06
BOUND PERIODICALS	0	0	0	0	0.	0.0	3	220039	167377	254928	37888.	0.06
MICROFORM BOOKS	4	1147126	8505	1690000	665710.	0.11	0	0	0	0	0.	0.0
MICROFORM PERIODICALS	2	352	75	630	278.	0.25	0	0	0	0	0.	0.0
PRINTED GOVERNMENT DOCUMENTS	8	446328	89640	960000	305609.	0.07	0	0	0	0	0.	0.0
AUDIO / VISUAL MATERIALS	8	139861	2226	598084	196290.	0.08	0	0	0	0	0.	0.0
OTHER	3	137266	3700	358100	157293.	0.01	0	0	0	0	0.	0.0

TYPE OF PUBLICATION	NUMBER OF LIBRARIES REPORTING	VOLUME TO TITLE RATIO			
		AVERAGE	LOW	HIGH	STD DEV
BOOKSTOCK	8	1.62:1	1.15:1	2.10:1	0.35
BOUND PERIODICALS	0	0.0 :1	0.0 :1	0.0 :1	0.0

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE II: STAFFING DISTRIBUTION, ENTIRE LIBRARY
10 LIBRARIES INCLUDED

TYPE OF EMPLOYEE	NUMBER OF LIBRARIES REPORTING	FULL TIME EQUIVALENCIES				NUMBER OF LIBRARIES REPORTING	ANNUAL SALARY EXPENDITURES,$			
		AVERAGE	LOW	HIGH	STD DEV		AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	10	59.82	35.00	103.25	22.12	10	968213.	563440.	1837566.	382695.
OTHER PROFESSIONAL	8	2.50	1.00	7.00	2.12	8	40433.	13600.	118908.	34955.
LIBRARY ASSISTANT	10	107.27	35.00	299.00	75.18	10	989030.	273068.	3116925.	809330.
CLERK	9	27.00	4.00	64.00	18.75	9	182397.	37644.	322966.	98563.
STUDENT / PAGE	9	54.73	21.97	95.32	23.42	10	255030.	20200.	497672.	140476.
OTHER	5	3.90	0.50	7.00	2.27	5	40363.	7524.	65748.	23339.
STAFF PAID BY OUTSIDE SOURCES	7	12.59	0.50	31.62	12.56	0	0.	0.	0.	0.
VOLUNTEER	1	0.25	0.25	0.25	0.0	0	0.	0.	0.	0.

TYPE OF EMPLOYEE	NUMBER OF FTE REPORTED	AVERAGE SALARY PER FTE				NUMBER OF LIBRARIES REPORTING	FRINGE BENEFIT RATES			
		AVERAGE	LOW	HIGH	STD DEV		AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	598.25	16184.	14086.	18561.	1748.	10	14.35%	11.00%	20.00%	2.53
OTHER PROFESSIONAL	20.00	16173.	13600.	20000.	1550.	8	15.19%	11.00%	20.00%	2.77
LIBRARY ASSISTANT	1072.70	9220.	5943.	10636.	1469.	10	14.86%	11.00%	20.00%	3.03
CLERK	243.00	6755.	5046.	11083.	1765.	9	15.01%	11.00%	20.00%	3.06
STUDENT / PAGE	492.54	5137.	3952.	8567.	1022.	6	3.84%	0.60%	10.10%	3.24
OTHER	19.50	10349.	7037.	15048.	2330.	5	11.98%	0.61%	17.30%	5.90

A: SURVEY OF 100 LIBRARIES. LARGE ACADEMIC STRATUM

TABLE III: PROCESSING AND REFERENCE SUPPORT
10 LIBRARIES INCLUDED
1 LIBRARIES USING NO OUTSIDE SUPPORT
9 LIBRARIES USING OUTSIDE SUPPORT
0 LIBRARIES NOT RESPONDING

DEPT / LIBRARY TASK DESCRIPTION	NUMBER OF LIBRARIES USING OUTSIDE SUPPORT FOR THIS TASK	NUMBER OF LIBRARIES INDICATING AVAILABLE TASK DATA	ANNUAL VOLUME AVERAGE	ANNUAL VOLUME LOW	ANNUAL VOLUME HIGH	STD DEV
ACQUISITIONS						
1. SEARCHING FOR NEW TITLES	3	2	33000.	16000.	50000.	17000.
2. CHECKING THAT TITLES ARE NOT IN LIBRARY	0	0	0.	0.	0.	0.
3. CHECKING THAT TITLES ARE NOT BACK-ORDERED	1	0	0.	0.	0.	0.
4. PRODUCING ORDERS FOR MATERIALS	4	4	46325.	8555.	90000.	36579.
5. PRODUCING CLAIM/CANCEL NOTICES	2	1	3500.	3500.	3500.	0.
6. ENCUMBRANCE OF BUDGETED FUNDS	3	2	6100.	200.	12000.	5900.
7. PRODUCING PAYMENTS TO VENDORS OR SUPPLIERS	0	0	0.	0.	0.	0.
8. PRODUCING LISTS OF NEW ACQUISITIONS	2	2	26.	12.	40.	14.
9. PERIODIC STATISTICS ON ACQUISITIONS	1	1	12.	12.	12.	0.
10. OTHER ACQUISITION PRODUCTS	3	3	44344.	532.	99999.	41462.
CATALOGING						
11. VERIFICATION THAT ITEM IS NOT CATALOGED	1	1	50000.	50000.	50000.	0.
12. SEARCHING FOR CATALOGING DATA	5	3	34800.	19400.	50000.	12493.
13. PRODUCING CATALOGING COPY	6	4	20725.	13000.	31000.	7585.
14. PRODUCTION OF CATALOG CARDS	5	4	38650.	11400.	99999.	35745.
15. PRODUCTION OF BOOK CATALOG	0	0	0.	0.	0.	0.
16. PRODUCTION OF MICROFORM CATALOG	0	0	0.	0.	0.	0.
17. PRODUCTION OF SHELF PREPARATION MATERIALS	1	1	99999.	99999.	99999.	0.
18. CATALOG AUTHORITY CONTROL	2	1	3000.	3000.	3000.	0.
19. PRODUCING SPECIALIZED BIBLIOGRAPHIES	1	1	150.	150.	150.	0.
20. PRODUCING CATALOGING VOLUME STATISTICS	3	3	8341.	12.	25000.	11779.
21. PRODUCING CATALOGING COST STATISTICS	0	0	0.	0.	0.	0.
22. OTHER CATALOGING PRODUCTS	4	2	6000.	6000.	6000.	0.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE III: PROCESSING AND REFERENCE SUPPORT
10LIBRARIES INCLUDED
1 LIBRARIES USING NO OUTSIDE SUPPORT
9 LIBRARIES USING OUTSIDE SUPPORT
0LIBRARIES NOT RESPONDING

DEPT / LIBRARY TASK DESCRIPTION	NUMBER OF LIBRARIES USING OUTSIDE SUPPORT FOR THIS TASK	INDICATING AVAILABLE TASK DATA		ANNUAL VOLUME		
			AVERAGE	LOW	HIGH	STD DEV
INTER - LIBRARY LOAN						
23. VERIFICATION OF BIBLIOGRAPHIC INFORMATION	3	2	1525.	1200.	1850.	325.
24. LOCATING HOLDING LIBRARIES	4	2	689.	317.	1061.	372.
25. COMMUNICATING ILL REQUESTS TO LIBRARIES	1	1	239.	239.	239.	0.
26. MONITORING STATUS OF ILL REQUESTS	1	1	31.	31.	31.	0.
27. PAYING FOR ILL SERVICES	2	1	183.	183.	183.	0.
28. CHECKING AVAILABILITY OF TITLES IN YOUR LIBRARY	0	0	0.	0.	0.	0.
29. MONITORING THE STATUS OF LOANS	0	0	0.	0.	0.	0.
30. BILLING FOR ILL SERVICES	0	0	0.	0.	0.	0.
31. PERIODIC ILL STATISTICS	1	1	12.	12.	12.	0.
32. OTHER ILL PRODUCTS (SPECIFY)	2	2	2461.	455.	4467.	2006.
SERIALS						
33. CLAIMING OF LATE PERIODICAL ISSUES	1	1	12000.	12000.	12000.	0.
34. CANCELLING OF PERIODICAL SUBSCRIPTIONS	0	0	0.	0.	0.	0.
35. RENEWAL OF PERIODICAL SUBSCRIPTIONS	1	0	0.	0.	0.	0.
36. CONTROLLING OF PERIODICAL BINDING OPERATIONS	0	0	0.	0.	0.	0.
37. SERIALS CHECK-IN OF ISSUES	3	2	88600.	77200.	99999.	11400.
38. PAYING FOR EXISTING PERIODICAL SUBSCRIPTIONS	2	1	20000.	20000.	20000.	0.
39. OTHER SERIALS-ORIENTED PRODUCTS	7	2	18.	9.	26.	9.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE III: PROCESSING AND REFERENCE SUPPORT
10LIBRARIES INCLUDED
1 LIBRARIES USING NO OUTSIDE SUPPORT
9 LIBRARIES USING OUTSIDE SUPPORT
0LIBRARIES NOT RESPONDING

DEPT / LIBRARY TASK DESCRIPTION	NUMBER OF LIBRARIES USING OUTSIDE SUPPORT FOR THIS TASK	NUMBER OF LIBRARIES INDICATING AVAILABLE TASK DATA	ANNUAL VOLUME AVERAGE	ANNUAL VOLUME LOW	ANNUAL VOLUME HIGH	STD DEV
CIRCULATION						
40. MAINTAINING RECORDS OF USERS BORROWING MATERIALS	3	2	30963.	11925.	50000.	19038.
41. IDENTIFICATION OF CIRCULATING MATERIALS	2	1	99999.	99999.	99999.	0.
42. PLACING HOLDS ON CIRCULATING MATERIALS FOR USERS	1	1	4977.	4977.	4977.	0.
43. NOTIFYING USERS OF THE STATUS OF THEIR HOLDS	0	0	0.	0.	0.	0.
44. NOTIFYING USERS OF OVERDUE MATERIALS	2	1	12295.	12295.	12295.	0.
45. COMPUTING FINES FOR OVERDUE MATERIALS	1	1	36881.	36881.	36881.	0.
46. BILLING USERS FOR OVERDUE MATERIALS	1	1	12294.	12294.	12294.	0.
47. PRODUCING PERIODIC CIRCULATION VOLUME STATISTICS	2	1	276.	276.	276.	0.
48. PRODUCING CIRCULATION COST STATISTICS	0	0	0.	0.	0.	0.
49. OTHER CIRCULATION PRODUCTS	4	3	2527.	40.	6000.	2531.
REFERENCE						
50. DATA BASE SEARCHES UPON REQUEST	6	5	2397.	33.	7400.	2651.
51. PERIODIC, ON-GOING SEARCHES	5	4	944.	33.	2168.	921.
52. PRODUCING PRINTED CITATIONS	6	4	51538.	33.	99999.	48509.
53. BILLING FOR DATA BASE SERVICES	3	2	197.	33.	360.	164.
54. PRODUCTION OF USE STATISTICS	2	2	19.	4.	33.	15.
55. PRODUCTION OF COST STATISTICS	1	1	33.	33.	33.	0.
56. OTHER REFERENCE PRODUCTS (SPECIFY)	2	1	99.	99.	99.	0.
OTHER LIBRARY FUNCTION						
57. OTHER FUNCTIONS, TASKS, OR PRODUCTS	1	1	35000.	35000.	35000.	0.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE III: PROCESSING AND REFERENCE SUPPORT
10LIBRARIES INCLUDED
1 LIBRARIES USING NO OUTSIDE SUPPORT
9 LIBRARIES USING OUTSIDE SUPPORT
0LIBRARIES NOT RESPONDING

DEPT / LIBRARY TASK DESCRIPTION	NUMBER OF LIBRARIES		ANNUAL COST,$			
	USING OUTSIDE SUPPORT FOR THIS TASK	INDICATING AVAILABLE TASK DATA	AVERAGE	LOW	HIGH	STD DEV
ACQUISITIONS						
1. SEARCHING FOR NEW TITLES	3	2	6954.	3908.	10000.	3046.
2. CHECKING THAT TITLES ARE NOT IN LIBRARY	0	0	0.	0.	0.	0.
3. CHECKING THAT TITLES ARE NOT BACK-ORDERED	1	1	300.	300.	300.	0.
4. PRODUCING ORDERS FOR MATERIALS	4	1	8000.	8000.	8000.	0.
5. PRODUCING CLAIM/CANCEL NOTICES	2	0	0.	0.	0.	0.
6. ENCUMBRANCE OF BUDGETED FUNDS	3	0	0.	0.	0.	0.
7. PRODUCING PAYMENTS TO VENDORS OR SUPPLIERS	0	0	0.	0.	0.	0.
8. PRODUCING LISTS OF NEW ACQUISITIONS	2	1	5000.	5000.	5000.	0.
9. PERIODIC STATISTICS ON ACQUISITIONS	1	0	0.	0.	0.	0.
10. OTHER ACQUISITION PRODUCTS	3	2	9808.	7615.	12000.	2193.
CATALOGING						
11. VERIFICATION THAT ITEM IS NOT CATALOGED	1	0	0.	0.	0.	0.
12. SEARCHING FOR CATALOGING DATA	5	0	0.	0.	0.	0.
13. PRODUCING CATALOGING COPY	6	1	35740.	35740.	35740.	0.
14. PRODUCTION OF CATALOG CARDS	5	2	27550.	5100.	50000.	22450.
15. PRODUCTION OF BOOK CATALOG	0	0	0.	0.	0.	0.
16. PRODUCTION OF MICROFORM CATALOG	0	0	0.	0.	0.	0.
17. PRODUCTION OF SHELF PREPARATION MATERIALS	1	0	0.	0.	0.	0.
18. CATALOG AUTHORITY CONTROL	2	0	0.	0.	0.	0.
19. PRODUCING SPECIALIZED BIBLIOGRAPHIES	1	1	3000.	3000.	3000.	0.
20. PRODUCING CATALOGING VOLUME STATISTICS	3	0	0.	0.	0.	0.
21. PRODUCING CATALOGING COST STATISTICS	0	0	0.	0.	0.	0.
22. OTHER CATALOGING PRODUCTS	4	2	10125.	250.	20000.	9875.

74.

TABLE III: PROCESSING AND REFERENCE SUPPORT
10LIBRARIES INCLUDED
1 LIBRARIES USING NO OUTSIDE SUPPORT
9 LIBRARIES USING OUTSIDE SUPPORT
0LIBRARIES NOT RESPONDING

DEPT / LIBRARY TASK DESCRIPTION	NUMBER OF LIBRARIES USING OUTSIDE SUPPORT FOR THIS TASK	NUMBER OF LIBRARIES INDICATING AVAILABLE TASK DATA	ANNUAL COST,$ AVERAGE	ANNUAL COST,$ LOW	ANNUAL COST,$ HIGH	STD DEV
INTER - LIBRARY LOAN						
23. VERIFICATION OF BIBLIOGRAPHIC INFORMATION	3	0	0.	0.	0.	0.
24. LOCATING HOLDING LIBRARIES	4	1	2500.	2500.	2500.	0.
25. COMMUNICATING ILL REQUESTS TO LIBRARIES	1	0	0.	0.	0.	0.
26. MONITORING STATUS OF ILL REQUESTS	1	0	0.	0.	0.	0.
27. PAYING FOR ILL SERVICES	2	0	0.	0.	0.	0.
28. CHECKING AVAILABILITY OF TITLES IN YOUR LIBRARY	0	0	0.	0.	0.	0.
29. MONITORING THE STATUS OF LOANS	0	0	0.	0.	0.	0.
30. BILLING FOR ILL SERVICES	0	0	0.	0.	0.	0.
31. PERIODIC ILL STATISTICS	1	1	1800.	1800.	1800.	0.
32. OTHER ILL PRODUCTS (SPECIFY)	2	2	10457.	8191.	12722.	2266.
SERIALS						
33. CLAIMING OF LATE PERIODICAL ISSUES	1	0	0.	0.	0.	0.
34. CANCELLING OF PERIODICAL SUBSCRIPTIONS	0	0	0.	0.	0.	0.
35. RENEWAL OF PERIODICAL SUBSCRIPTIONS	1	0	0.	0.	0.	0.
36. CONTROLLING OF PERIODICAL BINDING OPERATIONS	0	0	0.	0.	0.	0.
37. SERIALS CHECK-IN OF ISSUES	3	1	18000.	18000.	18000.	0.
38. PAYING FOR EXISTING PERIODICAL SUBSCRIPTIONS	2	0	0.	0.	0.	0.
39. OTHER SERIALS-ORIENTED PRODUCTS	7	2	23000.	16000.	30000.	7000.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE III: PROCESSING AND REFERENCE SUPPORT
10LIBRARIES INCLUDED
1 LIBRARIES USING NO OUTSIDE SUPPORT
9 LIBRARIES USING OUTSIDE SUPPORT
0LIBRARIES NOT RESPONDING

DEPT / LIBRARY TASK DESCRIPTION	NUMBER OF LIBRARIES		ANNUAL COST,$			
	USING OUTSIDE SUPPORT FOR THIS TASK	INDICATING AVAILABLE TASK DATA	AVERAGE	LOW	HIGH	STD DEV
CIRCULATION						
40. MAINTAINING RECORDS OF USERS BORROWING MATERIALS	3	1	7597.	7597.	7597.	0.
41. IDENTIFICATION OF CIRCULATING MATERIALS	2	1	7597.	7597.	7597.	0.
42. PLACING HOLDS ON CIRCULATING MATERIALS FOR USERS	1	1	7597.	7597.	7597.	0.
43. NOTIFYING USERS OF THE STATUS OF THEIR HOLDS	0	0	0.	0.	0.	0.
44. NOTIFYING USERS OF OVERDUE MATERIALS	2	1	7597.	7597.	7597.	0.
45. COMPUTING FINES FOR OVERDUE MATERIALS	1	1	7597.	7597.	7597.	0.
46. BILLING USERS FOR OVERDUE MATERIALS	1	1	7597.	7597.	7597.	0.
47. PRODUCING PERIODIC CIRCULATION VOLUME STATISTICS	2	1	7597.	7597.	7597.	0.
48. PRODUCING CIRCULATION COST STATISTICS	0	0	0.	0.	0.	0.
49. OTHER CIRCULATION PRODUCTS	4	3	31884.	360.	72500.	30145.
REFERENCE						
50. DATA BASE SEARCHES UPON REQUEST	6	3	11978.	4220.	25000.	9264.
51. PERIODIC, ON-GOING SEARCHES	5	2	4170.	2000.	6340.	2170.
52. PRODUCING PRINTED CITATIONS	6	1	1139.	1139.	1139.	0.
53. BILLING FOR DATA BASE SERVICES	3	1	282.	282.	282.	0.
54. PRODUCTION OF USE STATISTICS	2	1	72.	72.	72.	0.
55. PRODUCTION OF COST STATISTICS	1	0	0.	0.	0.	0.
56. OTHER REFERENCE PRODUCTS (SPECIFY)	2	0	0.	0.	0.	0.
OTHER LIBRARY FUNCTION						
57. OTHER FUNCTIONS, TASKS OR PRODUCTS	1	1	6000.	6000.	6000.	0.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE III: PROCESSING AND REFERENCE SUPPORT
10LIBRARIES INCLUDED
1 LIBRARIES USING NO OUTSIDE SUPPORT
9 LIBRARIES USING OUTSIDE SUPPORT
0LIBRARIES NOT RESPONDING

DEPT / LIBRARY TASK DESCRIPTION	NUMBER OF LIBRARIES USING OUTSIDE SUPPORT FOR THIS TASK	NUMBER OF LIBRARIES INDICATING AVAILABLE TASK DATA	ANNUAL COST PER VOLUME,$ AVERAGE	LOW	HIGH	STD DEV
ACQUISITIONS						
1. SEARCHING FOR NEW TITLES	3	1	0.24	0.24	0.24	0.0
2. CHECKING THAT TITLES ARE NOT IN LIBRARY	0	0	0.0	0.0	0.0	0.0
3. CHECKING THAT TITLES ARE NOT BACK-ORDERED	1	0	0.0	0.0	0.0	0.0
4. PRODUCING ORDERS FOR MATERIALS	4	1	0.11	0.11	0.11	0.0
5. PRODUCING CLAIM/CANCEL NOTICES	2	0	0.0	0.0	0.0	0.0
6. ENCUMBRANCE OF BUDGETED FUNDS	3	0	0.0	0.0	0.0	0.0
7. PRODUCING PAYMENTS TO VENDORS OR SUPPLIERS	0	0	0.0	0.0	0.0	0.0
8. PRODUCING LISTS OF NEW ACQUISITIONS	2	1	125.00	125.00	125.00	0.0
9. PERIODIC STATISTICS ON ACQUISITIONS	1	0	0.0	0.0	0.0	0.0
10. OTHER ACQUISITION PRODUCTS	3	2	0.18	0.12	0.23	0.06
CATALOGING						
11. VERIFICATION THAT ITEM IS NOT CATALOGED	1	0	0.0	0.0	0.0	0.0
12. SEARCHING FOR CATALOGING DATA	5	0	0.0	0.0	0.0	0.0
13. PRODUCING CATALOGING COPY	6	0	0.0	0.0	0.0	0.0
14. PRODUCTION OF CATALOG CARDS	5	1	2.00	2.00	2.00	0.0
15. PRODUCTION OF BOOK CATALOG	0	0	0.0	0.0	0.0	0.0
16. PRODUCTION OF MICROFORM CATALOG	0	0	0.0	0.0	0.0	0.0
17. PRODUCTION OF SHELF PREPARATION MATERIALS	1	0	0.0	0.0	0.0	0.0
18. CATALOG AUTHORITY CONTROL	2	0	0.0	0.0	0.0	0.0
19. PRODUCING SPECIALIZED BIBLIOGRAPHIES	1	1	20.00	20.00	20.00	0.0
20. PRODUCING CATALOGING VOLUME STATISTICS	3	0	0.0	0.0	0.0	0.0
21. PRODUCING CATALOGING COST STATISTICS	0	0	0.0	0.0	0.0	0.0
22. OTHER CATALOGING PRODUCTS	4	1	3.33	3.33	3.33	0.0

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE III: PROCESSING AND REFERENCE SUPPORT
10LIBRARIES INCLUDED
1 LIBRARIES USING NO OUTSIDE SUPPORT
9 LIBRARIES USING OUTSIDE SUPPORT
0LIBRARIES NOT RESPONDING

DEPT / LIBRARY TASK DESCRIPTION	NUMBER OF LIBRARIES USING OUTSIDE SUPPORT FOR THIS TASK	NUMBER OF LIBRARIES INDICATING AVAILABLE TASK DATA	ANNUAL COST PER VOLUME,$			
			AVERAGE	LOW	HIGH	STD DEV
INTER - LIBRARY LOAN						
23. VERIFICATION OF BIBLIOGRAPHIC INFORMATION	3	0	0.0	0.0	0.0	0.0
24. LOCATING HOLDING LIBRARIES	4	1	2.36	2.36	2.36	0.0
25. COMMUNICATING ILL REQUESTS TO LIBRARIES	1	0	0.0	0.0	0.0	0.0
26. MONITORING STATUS OF ILL REQUESTS	1	0	0.0	0.0	0.0	0.0
27. PAYING FOR ILL SERVICES	2	0	0.0	0.0	0.0	0.0
28. CHECKING AVAILABILITY OF TITLES IN YOUR LIBRARY	0	0	0.0	0.0	0.0	0.0
29. MONITORING THE STATUS OF LOANS	0	0	0.0	0.0	0.0	0.0
30. BILLING FOR ILL SERVICES	0	0	0.0	0.0	0.0	0.0
31. PERIODIC ILL STATISTICS	1	1	150.00	150.00	150.00	0.0
32. OTHER ILL PRODUCTS (SPECIFY)	2	2	10.43	2.85	18.00	7.58
SERIALS						
33. CLAIMING OF LATE PERIODICAL ISSUES	1	0	0.0	0.0	0.0	0.0
34. CANCELLING OF PERIODICAL SUBSCRIPTIONS	0	0	0.0	0.0	0.0	0.0
35. RENEWAL OF PERIODICAL SUBSCRIPTIONS	1	0	0.0	0.0	0.0	0.0
36. CONTROLLING OF PERIODICAL BINDING OPERATIONS	0	0	0.0	0.0	0.0	0.0
37. SERIALS CHECK-IN OF ISSUES	3	1	0.23	0.23	0.23	0.0
38. PAYING FOR EXISTING PERIODICAL SUBSCRIPTIONS	2	0	0.0	0.0	0.0	0.0
39. OTHER SERIALS-ORIENTED PRODUCTS	7	0	0.0	0.0	0.0	0.0

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE III: PROCESSING AND REFERENCE SUPPORT
10 LIBRARIES INCLUDED
1 LIBRARIES USING NO OUTSIDE SUPPORT
9 LIBRARIES USING OUTSIDE SUPPORT
0 LIBRARIES NOT RESPONDING

DEPT / LIBRARY TASK DESCRIPTION	NUMBER OF LIBRARIES USING OUTSIDE SUPPORT FOR THIS TASK	NUMBER OF LIBRARIES INDICATING AVAILABLE TASK DATA	ANNUAL COST PER VOLUME,$ AVERAGE	LOW	HIGH	STD DEV
CIRCULATION						
40. MAINTAINING RECORDS OF USERS BORROWING MATERIALS	3	1	0.64	0.64	0.64	0.0
41. IDENTIFICATION OF CIRCULATING MATERIALS	2	1	0.08	0.08	0.08	0.0
42. PLACING HOLDS ON CIRCULATING MATERIALS FOR USERS	1	1	1.53	1.53	1.53	0.0
43. NOTIFYING USERS OF THE STATUS OF THEIR HOLDS	0	0	0.0	0.0	0.0	0.0
44. NOTIFYING USERS OF OVERDUE MATERIALS	2	1	0.62	0.62	0.62	0.0
45. COMPUTING FINES FOR OVERDUE MATERIALS	1	1	0.21	0.21	0.21	0.0
46. BILLING USERS FOR OVERDUE MATERIALS	1	1	0.62	0.62	0.62	0.0
47. PRODUCING PERIODIC CIRCULATION VOLUME STATISTICS	2	1	27.53	27.53	27.53	0.0
48. PRODUCING CIRCULATION COST STATISTICS	0	0	0.0	0.0	0.0	0.0
49. OTHER CIRCULATION PRODUCTS	4	2	284.92	0.06	569.77	284.86
REFERENCE						
50. DATA BASE SEARCHES UPON REQUEST	6	3	7.39	4.85	9.51	1.93
51. PERIODIC, ON-GOING SEARCHES	5	2	14.80	2.92	26.67	11.87
52. PRODUCING PRINTED CITATIONS	6	1	0.01	0.01	0.01	0.0
53. BILLING FOR DATA BASE SERVICES	3	1	0.78	0.78	0.78	0.0
54. PRODUCTION OF USE STATISTICS	2	1	18.00	18.00	18.00	0.0
55. PRODUCTION OF COST STATISTICS	1	0	0.0	0.0	0.0	0.0
56. OTHER REFERENCE PRODUCTS (SPECIFY)	2	0	0.0	0.0	0.0	0.0
OTHER LIBRARY FUNCTION						
57. OTHER FUNCTIONS, TASKS, OR PRODUCTS	1	1	0.17	0.17	0.17	0.0

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE IV: UNIQUE COMPUTER SUPPORT
10LIBRARIES INCLUDED

SYSTEM FUNCTION	NUMBER OF LIBRARIES REPORTING	COST OF DEVELOPMENT				NUMBER OF LIBRARIES REPORTING	COST OF ANNUAL MAINTENANCE			
		AVERAGE	LOW	HIGH	STD DEV		AVERAGE	LOW	HIGH	STD DEV
CIRCULATION	2	22653.	500.	44805.	22152.	4	45609.	500.	100000.	41907.
ACQUISITIONS	2	8000.	1000.	15000.	7000.	4	40021.	7615.	131000.	52545.
INTER - LIBRARY LOAN	1	1000.	1000.	1000.	0.	1	500.	500.	500.	0.
SERIALS	2	12000.	12000.	12000.	0.	4	30765.	3060.	87000.	33021.
INVENTRY CONTROL	0	0.	0.	0.	0.	1	6000.	6000.	6000.	0.
CATALOGING	0	0.	0.	0.	0.	0	0.	0.	0.	0.
PROCESSING	0	0.	0.	0.	0.	0	0.	0.	0.	0.
ACCOUNTING	0	0.	0.	0.	0.	2	12490.	980.	24000.	11510.

A: SURVEY OF 100 LIBRARIES   LARGE   ACADEMIC   STRATUM

TABLE V: EQUIPMENT AND COMMUNICATIONS COSTS
10 LIBRARIES INCLUDED

EQUIPMENT CATEGORY	NUMBER OF LIBRARIES REPORTING	ANNUAL COSTS AVERAGE	LOW	HIGH	STD DEV
1. COPYING	9	51944.	5000.	180846.	63056.
2. TELEX	0	0.	0.	0.	0.
3. TELETYPE, TWX	7	2209.	850.	3000.	651.
4. DATATEL	1	1086.	1086.	1086.	0.
5. OTHER TELETYPE SERVICE	0	0.	0.	0.	0.
6. FAX	0	0.	0.	0.	0.
7. DATAPHONE	1	1200.	1200.	1200.	0.
8. CRT	4	10368.	240.	37560.	15729.
9. LINE CHARGES TO COMPUTER	1	500.	500.	500.	0.
10. TELEPHONE OTHER THAN ABOVE	9	10656.	615.	24572.	7287.
11. OTHER COMMUNICATIONS COSTS	2	1198.	185.	2211.	1013.
12. TOTAL	10	62553.	14464.	194646.	60725.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VI: BUDGET AND EXPENDITURE PATTERNS,
10 LIBRARIES INCLUDED

		TOTAL LIBRARY					INCREASE OVER LAST YEAR'S EXPENDITURES			
BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	AVERAGE	LOW	HIGH	STD DEV	*NUMBER OF LIBRARIES REPORTING	AVERAGE	LOW	HIGH	STD DEV
CAPITAL EXPENDITURE	7	2550157.	8000.	10720287.	4117277.	7	2920789.	-69649.	10665992.	4306710.
TOTAL MATERIALS	10	1224067.	368000.	1855087.	417625.	10	157172.	65261.	364428.	100233.
BOOKSTOCK	5	732037.	515902.	1031600.	195278.	5	86519.	-42434.	304428.	116859.
PERIODICALS	6	583196.	360000.	1053437.	233698.	6	116033.	60000.	188581.	50611.
MICROFORM	1	29384.	29384.	29384.	0.	1	-31856.	-31856.	-31856.	0.
GOVERNMENT DOCUMENTS	4	11420.	6275.	20000.	5286.	4	3896.	-575.	7263.	3294.
AUDIO - VISUAL	4	15758.	10000.	31000.	8825.	4	-4164.	-8951.	1121.	3594.
OTHER MATERIALS	1	1400.	1400.	1400.	0.	1	825.	825.	825.	0.
TOTAL OPERATING	10	2991049.	1369353.	7133462.	1718513.	10	245106.	83577.	504626.	127467.
SALARIES AND FRINGE BENEFITS	10	2740504.	1240897.	6648692.	1583950.	10	242437.	71798.	529742.	136419.
AUTOMATED SYSTEMS	8	53761.	7540.	99077.	28343.	8	28818.	-1039.	56500.	18985.
OTHER SUPPORT SERVICES	6	91597.	6700.	365252.	124873.	5	-17488.	-60355.	4079.	23521.
EQUIPMENT RENTAL	10	14070.	600.	30000.	9303.	10	457.	-7547.	7676.	4556.
COMMUNICATIONS	9	16138.	7536.	33200.	7958.	9	1728.	-374.	7400.	2410.
SUPPLIES	10	39722.	16147.	73485.	18136.	10	-38629.	-346447.	8373.	109014.
OTHER OPERATING	7	120376.	3235.	269962.	108224.	4	-20639.	-49144.	4436.	23575.
TOTAL LIBRARY BUDGET	10	6000225.	2153800.	14062340.	3840516.	10	2348115.	136649.	10867988.	3722183.

2 LIBRARIES INDICATING NEW BUILDING INCLUDED IN CAPITAL BUDGET

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VIA: BUDGET AND EXPENDITURE PATTERNS: DEPARTMENTAL ALLOCATIONS
10 LIBRARIES INCLUDED

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	PERCENT ALLOCATED TO: ADMINISTRATION AVERAGE	LOW	HIGH	STD DEV	NUMBER OF LIBRARIES REPORTING	PERCENT ALLOCATED TO: ACQUISITIONS AVERAGE	LOW	HIGH	STD DEV
TOTAL OPERATING	10	9.02%	3.31%	19.18%	4.07	9	8.92%	3.26%	14.47%	2.90
SALARIES AND FRINGE BENEFITS	10	9.17%	3.55%	18.48%	3.71	9	9.51%	3.50%	15.32%	3.07
AUTOMATED SYSTEMS	1	15.26%	15.26%	15.26%	0.0	1	58.21%	58.21%	58.21%	0.0
OTHER SUPPORT SERVICES	4	12.16%	3.33%	31.55%	11.53	3	10.08%	3.52%	18.97%	6.52
EQUIPMENT RENTAL	3	59.91%	9.98%	92.00%	35.78	0	0.0 %	0.0 %	0.0 %	0.0
COMMUNICATIONS	4	35.98%	11.00%	100.00%	37.04	3	6.83%	3.09%	9.34%	2.69
SUPPLIES	4	3.87%	2.43%	5.66%	1.19	5	8.39%	3.00%	15.10%	4.03
OTHER OPERATING	1	6.18%	6.18%	6.18%	0.0	1	14.53%	14.53%	14.53%	0.0
TOTAL LIBRARY BUDGET	10	5.33%	1.04%	12.19%	3.16	9	5.08%	0.94%	7.83%	2.15

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VIA: BUDGET AND EXPENDITURE PATTERNS: DEPARTMENTAL ALLOCATIONS
10 LIBRARIES INCLUDED

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	PERCENT ALLOCATED TO: CATALOGING				NUMBER OF LIBRARIES REPORTING	PERCENT ALLOCATED TO: SERIALS			
		AVERAGE	LOW	HIGH	STD DEV		AVERAGE	LOW	HIGH	STD DEV
TOTAL OPERATING	9	15.68%	7.97%	19.98%	4.29	9	6.38%	2.89%	8.89%	1.75
SALARIES AND FRINGE BENEFITS	9	16.24%	8.34%	22.44%	4.53	9	6.75%	3.10%	9.45%	1.83
AUTOMATED SYSTEMS	3	51.35%	11.58%	86.59%	30.79	2	34.01%	31.20%	36.82%	2.81
OTHER SUPPORT SERVICES	3	17.93%	3.52%	28.21%	10.49	3	3.44%	1.03%	5.77%	1.94
EQUIPMENT RENTAL	3	43.48%	8.20%	100.00%	40.37	0	0.0 %	0.0 %	0.0 %	0.0
COMMUNICATIONS	3	5.98%	1.86%	9.69%	3.21	3	3.93%	2.00%	5.46%	1.44
SUPPLIES	5	16.78%	5.66%	32.14%	9.99	5	5.76%	1.13%	15.10%	5.15
OTHER OPERATING	1	29.37%	29.37%	29.37%	0.0	1	4.95%	4.95%	4.95%	0.0
TOTAL LIBRARY BUDGET	9	8.99%	2.45%	14.80%	4.19	9	3.83%	0.86%	6.58%	2.01

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VIA: BUDGET AND EXPENDITURE PATTERNS: DEPARTMENTAL ALLOCATIONS
10 LIBRARIES INCLUDED

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	PERCENT ALLOCATED TO: INTER - LIBRARY LOAN				NUMBER OF LIBRARIES REPORTING	PERCENT ALLOCATED TO: MATERIALS FINISHING			
		AVERAGE	LOW	HIGH	STD DEV		AVERAGE	LOW	HIGH	STD DEV
TOTAL OPERATING	9	1.98%	1.14%	3.25%	0.62	9	4.22%	1.10%	9.17%	3.07
SALARIES AND FRINGE BENEFITS	9	2.03%	1.23%	3.06%	0.54	9	3.76%	1.14%	9.60%	2.98
AUTOMATED SYSTEMS	1	4.14%	4.14%	4.14%	0.0	0	0.0 %	0.0 %	0.0 %	0.0
OTHER SUPPORT SERVICES	3	5.15%	1.06%	10.26%	3.82	3	25.42%	1.18%	68.45%	30.51
EQUIPMENT RENTAL	1	10.60%	10.60%	10.60%	0.0	1	8.00%	8.00%	8.00%	0.0
COMMUNICATIONS	3	10.10%	1.30%	18.56%	7.05	3	2.20%	0.97%	4.33%	1.51
SUPPLIES	4	2.57%	1.26%	5.66%	1.81	5	14.53%	3.64%	21.07%	6.93
OTHER OPERATING	2	2.93%	1.23%	4.64%	1.70	1	3.25%	3.25%	3.25%	0.0
TOTAL LIBRARY BUDGET	9	1.23%	0.17%	2.06%	0.61	9	2.84%	0.26%	7.73%	2.57

A:SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VII: REGIONAL LIBRARY SUMMARY
10 LIBRARIES INCLUDED
A: SERVICES PROVIDED BY REGIONAL LIBRARIES

TYPE OF SERVICE	NUMBER IN THIS STRATUM PROVIDING REGIONAL SERVICE	NUMBER IN THIS STRATUM PROVIDING THIS SERVICE	PERCENT PROVIDING THIS SERVICE
ACQUISITIONS			
1. MAINTAIN STANDING ORDERS	7	0	0.0%
2. PAYMENT PROCESSING	7	0	0.0%
3. COLLECTION DEVELOPMENT	7	0	0.0%
4. CLAIM BACKORDERED ITEMS	7	0	0.0%
5. RETURNS	7	0	0.0%
6. CANCELLATIONS	7	0	0.0%
7. OTHER	7	0	0.0%
CATALOGING			
8. PRODUCE CARD SETS	7	1	14.3%
9. PHYSICAL PROCESSING	7	0	0.0%
10. PROVIDE CATALOGING COPY	7	2	28.6%
11. PRODUCE CATALOGS	7	1	14.3%
12. OTHER	7	0	0.0%
INTER - LIBRARY LOAN			
13. PROVIDE LOCATIONS	7	3	42.9%
14. VERIFICATION	7	4	57.1%
15. ACT AS SWITCHING CENTER	7	4	57.1%
16. OTHER	7	2	28.6%
REFERENCE			
17. DATA BASE SEARCHES	7	3	42.9%
18. REFERRAL SERVICES	7	1	14.3%
19. OTHER	7	2	28.6%
OTHER			
20. MAINTAIN A UNION CATALOG	7	1	14.3%
21. OTHER REGIONAL SERVICES	7	0	0.0%
NONE			
22. NO REGIONAL SERVICES	7	0	0.0%

A:SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VII: REGIONAL LIBRARY SUMMARY
10 LIBRARIES INCLUDED
B: TYPES OF LIBRARIES SUPPORTED

TYPE OF LIBRARY	NUMBER OF LIBRARIES REPORTING	NUMBER OF LIBRARIES SUPPORTED AVERAGE	LOW	HIGH	STD DEV
PUBLIC	3	48.	13.	65.	24.51
ACADEMIC	4	9.	2.	12.	4.09
SCHOOL	2	99.	99.	99.	0.0
SPECIAL	2	68.	68.	68.	0.0
TOTAL	5	102.	2.	244.	115.67

**99. INDICATES 99 OR MORE LIBRARIES SUPPORTED

A:SURVEY OF 100 LIBRARIES.   LARGE   ACADEMIC STRATUM

TABLE VII: REGIONAL LIBRARY SUMMARY
10 LIBRARIES INCLUDED
C: REGIONAL INTERLIBRARY LOAN

REQUESTS	NUMBER OF LIBRARIES REPORTING	AVERAGE	VOLUME DURING THE LAST REPORTING YEAR		STD DEV
			LOW	HIGH	
TOTAL REQUESTS	3	18472.	2913.	44850.	18752.
FILLED REQUESTS	3	14132.	961.	37226.	16383.
FILL RATE	3	57.%	33.%	83.%	20.46
% FILLED FROM LIBRARY	3	57.%	33.%	82.%	20.0
% FILLED FROM ANOTHER LIBRARY	1	1.%	1.%	1.%	0.0
% FORWARDED TO STATE LIBRARY	1	8.%	8.%	8.%	0.0
% FORWARDED TO LIBRARY OUTSIDE REGION	2	12.%	10.%	13.%	1.5
% FORWARDED TO A BIBLIOGRAPHIC CENTER	1	67.%	67.%	67.%	0.0
% RETURNED TO REQUESTER WITH LOCATION INFORMATION	2	11.%	2.%	20.%	9.0
% RETURNED TO REQUESTER UNFILLED	2	2.%	1.%	3.%	1.0
% UNFILLED	2	16.%	5.%	27.%	11.0

A:SURVEY OF 100 LIBRARIES. LARGE ACADEMIC STRATUM

TABLE VII: REGIONAL LIBRARY SUMMARY
10 LIBRARIES INCLUDED
D: REGIONAL CATALOG MAINTENANCE

	NUMBER OF LIBRARIES PROVIDING CATALOG	CATALOG SIZE,ETC. AVERAGE	LOW	HIGH	STD DEV
TYPE OF HOLDINGS					
MONOGRAPHS	1				
SERIALS	1				
OTHER	0				
COMBINED	1				
TITLES	1	21362.00	21362.00	21362.00	0.0
TITLES ADDED	1	4272.00	4272.00	4272.00	0.0
LOCATIONS	1	17.00	17.00	17.00	0.0
LOCATIONS PER TITLE	1	17.00	17.00	17.00	0.0
YEARS IN EXISTENCE	1	6.00	6.00	6.00	0.0

A:SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VII: REGIONAL LIBRARY SUMMARY
10 LIBRARIES INCLUDED
E: REIMBURSEMENT
6 LIBRARIES RECEIVING REIMBURSEMENT

CHARACTERISTICS OF REIMBURSEMENTS	NUMBER OF LIBRARIES RECEIVING	AVERAGE	AMOUNT LOW	HIGH	STD DEV
GENERAL					
SALARIES FOR HQS STAFF	5	19650.00	2400.00	78871.00	29679.43
ANNUAL SUPPLY SUPPLEMENT	3	2902.67	908.00	6600.00	2617.13
ANNUAL EQUIPMENT SUPPLMT	1	50.00	50.00	50.00	0.0
ANNUAL STIPEND	0	0.0	0.0	0.0	0.0
CATALOGING					
PER VOLUME PROCESSED	0	0.0	0.0	0.0	0.0
PER CARD SET	1	0.85	0.85	0.85	0.0
PER ENTRY IN CATALOG	0	0.0	0.0	0.0	0.0
ACQUISITIONS					
PER VOLUME ORDERED	0	0.0	0.0	0.0	0.0
INTER - LIBRARY LOAN					
PER FILLED REQUEST	2	0.10	0.10	0.10	0.0
PER UNFILLED REQUEST	1	0.50	0.50	0.50	0.0
PER REQUEST FOR LOC INFO	0	0.0	0.0	0.0	0.0
OTHER	4	6019.75	53.00	20225.00	8260.59

SOURCE OF REIMBURSEMENT	NUMBER OF LIBRARIES RECEIVING	AVERAGE	PERCENTAGE LOW	HIGH	STD DEV
STATE LIBRARIES	3	98.00%	94.00%	100.00%	2.83
PARTICIPATING LIBRARIES	2	75.00%	50.00%	100.00%	25.00
OTHER	4	63.50%	6.00%	99.00%	38.76

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VIII: ACQUISITIONS DEPARTMENT
10 LIBRARIES INCLUDED
A: BUDGET PROFILE

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	AVERAGE	DEPARTMENT LOW	HIGH	STD DEV	NUMBER OF LIBRARIES REPORTING	INCREASE OVER LAST YEAR'S EXPENDITURES AVERAGE	LOW	HIGH	STD DEV
TOTAL OPERATING	9	246225.	129751.	381238.	90577.	9	15679.	-47163.	56408.	27783.
SALARIES AND FRINGE BENEFITS	9	239906.	123551.	381238.	86529.	9	13943.	-59025.	55408.	31181.
AUTOMATED SYSTEMS	1	25300.	25300.	25300.	0.	1	13000.	13000.	13000.	0.
OTHER SUPPORT SERVICES	3	3970.	1700.	6509.	1973.	3	223.	161.	275.	47.
EQUIPMENT RENTAL	0	0.	0.	0.	0.	0	0.	0.	0.	0.
COMMUNICATIONS	3	1139.	500.	2077.	678.	3	119.	107.	131.	12.
SUPPLIES	5	3155.	600.	5476.	1616.	5	-25.	-1138.	620.	611.
OTHER OPERATING	1	470.	470.	470.	0.	1	106.	106.	106.	0.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VIII: ACQUISITIONS DEPARTMENT
10 LIBRARIES INCLUDED
A: BUDGET PROFILE

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	LAST YEAR'S EXPENDITURES AVERAGE	LOW	HIGH	STD DEV	NUMBER OF LIBRARIES REPORTING	EXPENDITURE PER THROUGHPUT AVERAGE	LOW	HIGH	STD DEV
TOTAL OPERATING	9	232288.	97787.	424653.	96408.	9	4.84	2.81	14.11	2.75
SALARIES AND FRINGE BENEFITS	9	227512.	91769.	408015.	93231.	9	4.74	2.80	13.55	2.61
AUTOMATED SYSTEMS	2	6953.	1605.	12300.	5348.	2	0.19	0.04	0.41	0.18
OTHER SUPPORT SERVICES	3	3747.	1468.	6348.	2005.	3	0.10	0.06	0.15	0.04
EQUIPMENT RENTAL	0	0.	0.	0.	0.	0	0.0	0.0	0.0	0.0
COMMUNICATIONS	3	1060.	500.	1946.	634.	3	0.03	0.02	0.05	0.01
SUPPLIES	5	3181.	589.	4856.	1603.	5	0.09	0.01	0.16	0.05
OTHER OPERATING	1	364.	364.	364.	0.	1	0.01	0.01	0.01	0.0

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VIII: ACQUISITIONS DEPARTMENT
10 LIBRARIES INCLUDED
B: STAFFING AND SALARY EXPENDITURES

TYPE OF EMPLOYEE	NUMBER OF FTE REPORTED	VOLUME THROUGHPUT PER ACQ FTE AVERAGE	VOLUME THROUGHPUT PER ACQ FTE LOW	VOLUME THROUGHPUT PER ACQ FTE HIGH	VOLUME THROUGHPUT PER ACQ FTE STD DEV	NUMBER OF LIBRARIES REPORTING	ANNUAL ACQ SAL $ EXP PER VOLUME THROUGHPUT AVERAGE	ANNUAL ACQ SAL $ EXP PER VOLUME THROUGHPUT LOW	ANNUAL ACQ SAL $ EXP PER VOLUME THROUGHPUT HIGH	ANNUAL ACQ SAL $ EXP PER VOLUME THROUGHPUT STD DEV
PROFESSIONAL LIBRARIAN	36.60	12130.87	4300.29	52423.00	9308.44	10	1.52	0.33	3.47	0.93
OTHER PROFESSIONAL	1.00	30102.00	30102.00	30102.00	0.0	1	0.49	0.49	0.49	0.0
LIBRARY ASSISTANT	117.75	3770.61	1920.00	14866.66	1939.42	10	2.47	0.54	4.11	0.94
CLERK	28.50	8643.04	2400.00	43047.00	9000.17	7	1.09	0.22	2.74	0.98
STUDENT / PAGE	25.14	16640.09	6297.49	64756.97	15069.68	10	0.30	0.04	0.94	0.27
OTHER	2.00	43823.50	43047.00	44600.00	776.50	2	0.26	0.22	0.30	0.04
STAFF PAID BY OUTSIDE SOURCES	9.85	16632.68	5739.60	60948.00	20085.49	0	0.0	0.0	0.0	0.0
VOLUNTEER	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
TOTAL	220.84	2010.46	857.14	3185.71	794.50	10	5.16	2.65	10.11	2.37

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VIII: ACQUISITIONS DEPARTMENT
10 LIBRARIES INCLUDED
B: STAFFING AND SALARY EXPENDITURES

TYPE OF EMPLOYEE	NUMBER OF LIBRARIES REPORTING	FULL TIME EQUIVALENCIES AVERAGE	LOW	HIGH	STD DEV	NUMBER OF LIBRARIES REPORTING	ANNUAL SALARY EXPENDITURES,$ AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	10	3.66	1.00	7.00	1.68	10	56174.	18220.	104532.	27764.
OTHER PROFESSIONAL	1	1.00	1.00	1.00	0.0	1	14820.	14820.	14820.	0.
LIBRARY ASSISTANT	10	11.77	3.00	22.00	5.91	10	107880.	24228.	214680.	61260.
CLERK	7	4.07	1.00	8.50	2.68	7	29912.	6448.	70500.	21365.
STUDENT / PAGE	9	2.79	0.75	6.00	1.87	10	11309.	1010.	28431.	8640.
OTHER	2	1.00	1.00	1.00	0.0	2	11355.	9822.	12888.	1533.
STAFF PAID BY OUTSIDE SOURCES	3	3.28	1.10	7.50	2.98	0	0.	0.	0.	0.
VOLUNTEER	0	0.0	0.0	0.0	0.0	0	0.	0.	0.	0.

TYPE OF EMPLOYEE	NUMBER OF FTE REPORTED	AVERAGE SALARY PER FTE AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	36.60	15348.	10738.	18220.	1703.
OTHER PROFESSIONAL	1.00	14820.	14820.	14820.	0.
LIBRARY ASSISTANT	117.75	9162.	6760.	10407.	1090.
CLERK	28.50	7347.	5421.	9396.	1039.
STUDENT / PAGE	25.14	4458.	1748.	7345.	1675.
OTHER	2.00	11355.	9822.	12888.	1533.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE VIII: ACQUISITIONS DEPARTMENT
C: ORDERING PATTERNS
10 LIBRARIES INCLUDED

MATERIAL TYPE AND/OR SOURCE	NUMBER OF LIBRARIES REPORTING	TOTAL THROUGHPUT AVERAGE	LOW	HIGH	STD DEV
MONOGRAPH TITLES	10	37552.	11800.	66185.	15716.
SERIAL TITLES	9	7608.	200.	22392.	7058.
TOTAL TITLES	10	44399.	12000.	76185.	18171.
% STANDING ORDER	10	7.%	1.%	20.%	5.9
% APPROVAL PLAN	10	21.%	5.%	36.%	10.3
% ORDER REQUEST	10	54.%	38.%	66.%	8.1
% GIFT/EXCHANGE	10	15.%	5.%	32.%	8.2
% OTHER	4	6.%	1.%	14.%	4.8
YEAR IMPRINT					
% 1975-76	9	57.%	10.%	85.%	20.1
% 1969-74	9	30.%	4.%	80.%	20.3
% PRE1969	8	7.%	1.%	15.%	4.5
BACKFILE AND RETROSPECTIVE					
% SERIAL BACKFILE SUPPLEMENT	6	51.8%	1.0%	99.0%	47.2
% MONOGRAPH RETROSPECTIVE COLLECTION DEVELOPMENT	6	24.2%	1.0%	50.0%	22.7

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE IX: CATALOGING DEPARTMENT
10 LIBRARIES INCLUDED
A: BUDGET PROFILE

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	DEPARTMENT AVERAGE	LOW	HIGH	STD DEV	NUMBER OF LIBRARIES REPORTING	INCREASE OVER LAST YEAR'S EXPENDITURES AVERAGE	LOW	HIGH	STD DEV
TOTAL OPERATING	9	513694.	118991.	1291198.	334884.	9	58945.	13656.	101727.	24818.
SALARIES AND FRINGE BENEFITS	9	495528.	114391.	1291198.	341245.	9	48672.	12299.	101727.	31813.
AUTOMATED SYSTEMS	3	31213.	7800.	50000.	17536.	0	0.	0.	0.	0.
OTHER SUPPORT SERVICES	3	8587.	1700.	18562.	7222.	3	-1488.	-3410.	240.	1496.
EQUIPMENT RENTAL	3	2157.	600.	3900.	1354.	3	-1711.	-5153.	563.	2475.
COMMUNICATIONS	3	1125.	300.	2500.	979.	3	105.	40.	170.	65.
SUPPLIES	5	6659.	1790.	17985.	5863.	5	-445.	-1708.	1342.	1032.
OTHER OPERATING	1	950.	950.	950.	0.	1	153.	153.	153.	0.

132

133

A: SURVEY OF 100 LIBRARIES. LARGE ACADEMIC STRATUM

TABLE IX: CATALOGING DEPARTMENT

10 LIBRARIES INCLUDED

B: STAFFING AND SALARY EXPENDITURES

TYPE OF EMPLOYEE	NUMBER OF LIBRARIES REPORTING	FULL TIME EQUIVALENCIES				NUMBER OF LIBRARIES REPORTING	ANNUAL SALARY EXPENDITURES,$			
		AVERAGE	LOW	HIGH	STD DEV		AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	10	11.09	5.00	17.00	4.28	10	177396.	78447.	290816.	64532.
OTHER PROFESSIONAL	1	0.50	0.50	0.50	0.0	1	3229.	3229.	3229.	0.
LIBRARY ASSISTANT	10	24.21	2.00	75.00	20.61	10	224517.	22656.	726649.	203602.
CLERK	5	7.60	2.00	16.00	4.96	5	40981.	13288.	79006.	23567.
STUDENT / PAGE	9	4.19	1.00	8.00	2.25	9	20052.	4576.	34162.	9491.
OTHER	0	0.0	0.0	0.0	0.0	0	0.	0.	0.	0.
STAFF PAID BY OUTSIDE SOURCES	3	2.86	0.74	7.00	2.93	0	0.	0.	0.	0.
VOLUNTEER	0	0.0	0.0	0.0	0.0	0	0.	0.	0.	0.

TYPE OF EMPLOYEE	NUMBER OF FTE REPORTED	AVERAGE SALARY PER FTE			
		AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	110.87	16000.	11675.	31533.	4175.
OTHER PROFESSIONAL	0.50	6458.	6458.	6458.	0.
LIBRARY ASSISTANT	242.15	9272.	6590.	11328.	1168.
CLERK	38.00	5392.	4938.	6644.	468.
STUDENT / PAGE	37.73	4783.	3837.	5907.	681.
OTHER	0.0	0.	0.	0.	0.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE IX: CATALOGING DEPARTMENT
10 LIBRARIES INCLUDED
A: BUDGET PROFILE

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	LAST YEAR'S EXPENDITURES				NUMBER OF LIBRARIES REPORTING	EXPENDITURE PER THROUGHPUT			
		AVERAGE	LOW	HIGH	STD DEV		AVERAGE	LOW	HIGH	STD DEV
TOTAL OPERATING	9	461298.	105335.	1189471.	309434.	9	11.76	6.28	17.79	3.92
SALARIES AND FRINGE BENEFITS	9	452264.	100885.	1189471.	310855.	9	11.53	6.12	17.79	4.01
AUTOMATED SYSTEMS	0	0.	0.	0.	0.	0	0.0	0.0	0.0	0.0
OTHER SUPPORT SERVICES	3	10075.	1460.	19856.	7555.	3	0.35	0.10	0.47	0.14
EQUIPMENT RENTAL	3	3869.	1144.	7125.	2471.	3	0.09	0.03	0.24	0.08
COMMUNICATIONS	3	1055.	300.	2330.	907.	3	0.04	0.02	0.06	0.02
SUPPLIES	5	7104.	2690.	16643.	5126.	5	0.19	0.10	0.40	0.11
OTHER OPERATING	1	797.	797.	797.	0.	1	0.03	0.03	0.03	0.0

A: SURVEY OF 100 LIBRARIES. LARGE ACADEMIC STRATUM

TABLE IX: CATALOGING DEPARTMENT
10 LIBRARIES INCLUDED
B: STAFFING AND SALARY EXPENDITURES

TYPE OF EMPLOYEE	NUMBER OF FTE REPORTED	TITLE THROUGHPUT PER CAT FTE AVERAGE	LOW	HIGH	STD DEV	NUMBER OF LIBRARIES REPORTING	ANNUAL CAT SAL $ EXP PER TITLE THROUGHPUT AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	110.87	3495.30	2231.81	5087.75	936.42	10	4.90	2.74	7.77	1.66
OTHER PROFESSIONAL	0.50	70378.00	70378.00	70378.00	0.0	1	0.09	0.09	0.09	0.0
LIBRARY ASSISTANT	242.15	1600.34	947.17	14929.66	1672.10	10	5.24	0.56	10.26	3.27
CLERK	38.00	3825.00	2799.31	7351.00	1266.02	5	1.30	0.90	1.76	0.33
STUDENT / PAGE	37.73	9881.30	3658.25	34593.00	6225.38	9	0.54	0.13	1.30	0.36
OTHER	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
STAFF PAID BY OUTSIDE SOURCES	8.59	14196.96	5996.29	60525.67	17689.62	0	0.0	0.0	0.0	0.0
VOLUNTEER	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
TOTAL	437.84	885.08	650.50	1633.56	214.66	10	11.28	5.78	17.65	3.85

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE IX: CATALOGING DEPARTMENT,
C: CATALOGING PATTERNS
10 LIBRARIES INCLUDED

TYPE OF MATERIAL	NUMBER OF LIBRARIES REPORTING	AVERAGE	LOW	HIGH	STD DEV
MONOGRAPH TITLES	10	33070.	13723.	53867.	12163.3
SERIALS TITLES	10	2524.	853.	8600.	2346.9
OTHER TITLES	8	3949.	119.	15248.	5064.4
TOTAL TITLES	10	38752.	14702.	71038.	15808.7
CATALOGING SOURCE					
% LC CAT	10	59.%	3.%	87.%	28.5
% NUC DATA	7	8.%	1.%	20.%	5.5
% CIP DATA	4	1.%	1.%	1.%	0.0
% SECONDARY SOURCE	6	34.%	5.%	79.%	29.7
% ORIG CATALOGING	9	16.%	5.%	30.%	7.4
RELATED DATA					
LAG TIME	10	33.	4.	60.	18.5
BACKLOG	10	43450.	1600.	205000.	60994.2
CARDS/RECORD ENTRY FOR:					
MONOGRAPH TITLES	9	10.	6.	14.	2.4
SERIALS TITLES	8	9.	6.	14.	2.5
OTHER TITLES	6	9.	5.	14.	3.0

PROOF SLIP SUBSCRIPTIONS
9 LIBRARIES RESPONDING
4 AFFIRMATIVE OR 44.4%
5 NEGATIVE
0 OTHER RESPONSE

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10 LIBRARIES INCLUDED
A: BUDGET PROFILE

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	DEPARTMENT				NUMBER OF LIBRARIES REPORTING	INCREASE OVER LAST YEAR'S EXPENDITURES			
		AVERAGE	LOW	HIGH	STD DEV		AVERAGE	LOW	HIGH	STD DEV
TOTAL OPERATING	9	57285.	23419.	135307.	29502.	9	5656.	1224.	10779.	3028.
SALARIES AND FRINGE BENEFITS	9	55012.	23019.	135307.	30279.	9	4969.	1202.	10779.	3005.
AUTOMATED SYSTEMS	1	1800.	1800.	1800.	0.	1	1315.	1315.	1315.	0.
OTHER SUPPORT SERVICES	3	1631.	893.	2000.	522.	3	441.	22.	1000.	411.
EQUIPMENT RENTAL	1	2550.	2550.	2550.	0.	1	350.	350.	350.	0.
COMMUNICATIONS	3	1936.	117.	3000.	1292.	3	496.	-41.	1428.	662.
SUPPLIES	4	763.	400.	1500.	449.	4	88.	22.	160.	49.
OTHER OPERATING	2	1175.	150.	2200.	1025.	2	333.	15.	650.	318.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10 LIBRARIES INCLUDED
A: BUDGET PROFILE

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	LAST YEAR'S EXPENDITURES AVERAGE	LOW	HIGH	STD DEV	NUMBER OF LIBRARIES REPORTING	EXPENDITURE PER THROUGHPUT AVERAGE	LOW	HIGH	STD DEV
TOTAL OPERATING	9	52257.	22195.	124528.	27337.	9	2.97	1.71	4.25	0.65
SALARIES AND FRINGE BENEFITS	9	50595.	21817.	124528.	27930.	9	2.88	1.68	4.25	0.64
AUTOMATED SYSTEMS	1	485.	485.	485.	0.	1	0.03	0.03	0.03	0.0
OTHER SUPPORT SERVICES	3	1190.	871.	1700.	364.	3	0.09	0.06	0.11	0.02
EQUIPMENT RENTAL	1	2200.	2200.	2200.	0.	1	0.14	0.14	0.14	0.0
COMMUNICATIONS	3	1440.	158.	2589.	997.	3	0.11	0.01	0.18	0.08
SUPPLIES	4	675.	317.	1340.	406.	4	0.05	0.02	0.12	0.04
OTHER OPERATING	2	843.	135.	1550.	708.	2	0.06	0.01	0.11	0.05

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10 LIBRARIES INCLUDED
B: STAFFING AND SALARY EXPENDITURES

TYPE OF EMPLOYEE	NUMBER OF LIBRARIES REPORTING	FULL TIME EQUIVALENCIES				NUMBER OF LIBRARIES REPORTING	ANNUAL SALARY EXPENDITURES,$			
		AVERAGE	LOW	HIGH	STD DEV		AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	8	1.07	0.10	2.00	0.50	8	16655.	1058.	26316.	7359.
OTHER PROFESSIONAL	0	0.0	0.0	0.0	0.0	0	0.	0.	0.	0.
LIBRARY ASSISTANT	10	3.08	1.00	10.00	2.46	10	27755.	6873.	87468.	22015.
CLERK	4	0.77	0.07	1.00	0.40	4	4258.	374.	5654.	2244.
STUDENT / PAGE	7	1.14	0.30	3.00	0.82	8	4818.	655.	11856.	3273.
OTHER	1	0.42	0.42	0.42	0.0	1	4522.	4522.	4522.	0.
STAFF PAID BY OUTSIDE SOURCES	5	1.06	0.50	1.80	0.42	0	0.	0.	0.	0.
VOLUNTEER	0	0.0	0.0	0.0	0.0	0	0.	0.	0.	0.

TYPE OF EMPLOYEE	NUMBER OF FTE REPORTED	AVERAGE SALARY PER FTE			
		AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	8.60	15493.	10580.	17453.	1650.
OTHER PROFESSIONAL	0.0	0.	0.	0.	0.
LIBRARY ASSISTANT	30.85	8997.	6873.	12320.	1403.
CLERK	3.07	5548.	5343.	5654.	95.
STUDENT / PAGE	8.00	4717.	2183.	8568.	1240.
OTHER	0.42	10767.	10767.	10767.	0.

A: SURVEY OF 100 LIBRARIES. LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10 LIBRARIES INCLUDED
B: STAFFING AND SALARY EXPENDITURES

TYPE OF EMPLOYEE	NUMBER OF FTE REPORTED	REQUEST PER ILL FTE				NUMBER OF LIBRARIES REPORTING	ANNUAL ILL SAL $ EXP PER REQUEST			
		AVERAGE	LOW	HIGH	STD DEV		AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	8.60	16447.20	6663.33	104369.94	13959.57	8	1.10	0.10	2.62	0.71
OTHER PROFESSIONAL	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
LIBRARY ASSISTANT	30.85	5464.47	3479.00	15403.00	2584.27	10	1.60	0.45	2.61	0.72
CLERK	3.07	19385.67	10437.00	295728.56	42259.61	4	0.33	0.02	0.52	0.19
STUDENT / PAGE	8.00	12915.35	5134.33	33316.66	8045.10	8	0.33	0.07	0.77	0.21
OTHER	0.42	49288.08	49288.08	49288.09	0.01	1	0.22	0.22	0.22	0.0
STAFF PAID BY OUTSIDE SOURCES	5.30	12679.23	7500.00	22328.00	4441.05	0	0.0	0.0	0.0	0.0
VOLUNTEER	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
TOTAL	56.24	2997.49	1776.32	3919.47	778.24	10	2.90	1.58	4.18	0.68

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10LIBRARIES INCLUDED
C: VOLUME OF BORROWING REQUESTS

BORROWING REQUESTS	NUMBER OF LIBRARIES REPORTING	VOLUME			
		AVERAGE	LOW	HIGH	STD DEV
TOTAL REQUESTS	10	5431.	2704.	10000.	2348.
NUMBER FILLED	10	4343.	2434.	7377.	1413.
FILL RATE	10	84.3%	58.1%	98.6%	13.0%
% FILLED LOCALLY	7	23.4%	1.0%	50.0%	17.7%
% FILLED IN STATE	9	36.7%	11.0%	75.0%	18.0%

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10LIBRARIES INCLUDED
D: NUMBER OF INSTITUTIONS QUERIED

STRATA	LIBRARIES REPORTING TOTAL	THIS STRATA	PERCENT
1.0-1.4	10	1.	10.0%
1.5-1.9	10	4.	40.0%
2.0-2.4	10	1.	10.0%
2.5-2.9	10	3.	30.0%
3.0-3.4	10	1.	10.0%
3.5-3.9	10	0.	0.0%
4.0-4.4	10	0.	0.0%
4.5-4.9	10	0.	0.0%
5.0-5.4	10	0.	0.0%
MODE	1.5-1.9		

AVERAGE 1.9

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10LIBRARIES INCLUDED
E: TIME REQUIRED TO FILL A REQUEST

SOURCE	NUMBER OF LIBRARIES REPORTING	AVERAGE DAYS AVERAGE	LOW	HIGH	STD DEV
THROUGH A BIB CENTER	7	19.	5.	60.	17.
FROM A LIBRARY LOCALLY	9	6.	3.	14.	3.
ELSEWHERE IN STATE	10	10.	3.	15.	3.
ADJOINING STATES	9	17.	10.	21.	4.
ELSEWHERE	10	27.	18.	45.	7.
OVERALL	10	16.	6.	27.	8.

```
A: SURVEY OF 100 LIBRARIES.  LARGE      ACADEMIC  STRATUM

   TABLE X: INTERLIBRARY LOAN DEPARTMENT
                 10LIBRARIES INCLUDED
         F: VERIFICATION

   9 LIBRARIFS OF     9 LIBRARIES RESPONDING NORMALLY VERIFY BORROWING REQUESTS

OR100.0%

   2 LIBRARIES OF    10 LIBRARIES RESPONDING NORMALLY VERIFY LENDING REQUESTS

OR 20.0%
```

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10LIBRARIES INCLUDED
G: FREQUENCY OF BORROWERS TABLE

	NUMBER OF		FREQUENCY IN TABLE				PLACE IN TABLE			
STRATA	LIBRARIES REPORTING	TOTAL OBSERVATIONS	AVERAGE	LOW	HIGH	STD DEV	AVERAGE	LOW	HIGH	STD DEV
LARGE ACADEMIC LIBRARY	8	18	2.	1.	4.	1.	5.	1.	10.	3.
STATE LIBRARY	2	3	2.	1.	2.	1.	7.	5.	10.	2.
LARGE PUBLIC LIBRARY	3	3	1.	1.	1.	0.	6.	6.	7.	0.
OTHER REGIONAL LIBRARY	2	2	1.	1.	1.	0.	4.	2.	5.	2.
OTHER ACADEMIC LIBRARY	10	48	5.	2.	7.	1.	5.	1.	10.	3.
OTHER PUBLIC LIBRARY	1	3	3.	3.	3.	0.	6.	3.	10.	3.
BIBLIOGRAPHIC CENTER	1	1	1.	1.	1.	0.	4.	4.	4.	0.
SPECIAL LIBRARY	7	9	1.	1.	2.	0.	5.	1.	10.	3.
OTHER LIBRARY	4	5	1.	1.	2.	0.	4.	1.	7.	2.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10LIBRARIES INCLUDED
H: FREQUENCY OF LENDERS TABLE

STRATA	NUMBER OF LIBRARIES REPORTING	NUMBER OF TOTAL OBSERVATIONS	FREQUENCY IN TABLE AVERAGE	LOW	HIGH	STD DEV	PLACE IN TABLE AVERAGE	LOW	HIGH	STD DEV
LARGE ACADEMIC LIBRARY	10	51	5.	1.	8.	2.	7.	1.	10.	3.
STATE LIBRARY	5	8	2.	1.	2.	0.	4.	1.	9.	3.
LARGE PUBLIC LIBRARY	1	1	1.	1.	1.	0.	9.	9.	9.	0.
OTHER REGIONAL LIBRARY	0	0	0.	0.	0.	0.	0.	0.	0.	0.
OTHER ACADEMIC LIBRARY	7	14	2.	1.	3.	1.	6.	1.	10.	3.
OTHER PUBLIC LIBRARY	1	1	1.	1.	1.	0.	2.	2.	2.	0.
BIBLIOGRAPHIC CENTER	1	1	1.	1.	1.	0.	4.	4.	4.	0.
SPECIAL LIBRARY	3	4	1.	1.	2.	0.	3.	1.	5.	2.
OTHER LIBRARY	3	4	1.	1.	2.	0.	5.	3.	8.	2.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10LIBRARIES INCLUDED
I: LOCATION OF BORROWERS TABLE

STRATA	NUMBER OF LIBRARIES REPORTING	NUMBER OF TOTAL OBSERVATIONS	FREQUENCY IN TABLE AVERAGE	FREQUENCY IN TABLE LOW	FREQUENCY IN TABLE HIGH	STD DEV	PLACE IN TABLE AVERAGE	PLACE IN TABLE LOW	PLACE IN TABLE HIGH	STD DEV
LOCAL LIBRARY	7	32	5.	2.	8.	3.	5.	1.	10.	3.
ELSEWHERE IN STATE	8	40	5.	1.	9.	3.	5.	1.	10.	3.
ADJOINING STATES	8	17	2.	1.	3.	1.	6.	2.	9.	2.
OTHER WESTERN STATES	2	3	2.	1.	2.	1.	7.	5.	10.	2.
OTHER EASTERN STATES	0	0	0.	0.	0.	0.	0.	0.	0.	0.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10LIBRARIES INCLUDED
J: LOCATION OF LENDERS TABLE

STRATA	NUMBER OF LIBRARIES REPORTING	TOTAL OBSERVATIONS	FREQUENCY IN TABLE				PLACE IN TABLE			
			AVERAGE	LOW	HIGH	STD DEV	AVERAGE	LOW	HIGH	STD DEV
LOCAL LIBRARY	3	9	3.	2.	5.	1.	4.	1.	10.	3.
ELSEWHERE IN STATE	7	19	3.	1.	7.	2.	4.	1.	8.	2.
ADJOINING STATES	8	21	3.	1.	5.	1.	5.	2.	10.	3.
OTHER WESTERN STATES	4	6	2.	1.	3.	1.	8.	1.	10.	3.
OTHER EASTERN STATES	8	29	4.	2.	6.	1.	6.	1.	10.	2.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10LIBRARIES INCLUDED
K: CHARACTERISTICS OF FILLED BORROWING REQUESTS

TYPE OF MATERIALS	NUMBER OF LIBRARIES REPORTING	PHOTOCOPY/DUPLICATE AVERAGE	LOW	HIGH	STD DEV	PERCENT OF TOTAL AVERAGE	LOW	HIGH	STD DEV
BOOKSTOCK	3	48.	20.	100.	37.	3.4%	1.6%	6.5%	2.2
PERIODICALS	8	2220.	1366.	4000.	900.	98.5%	91.9%	100.0%	2.6
MICROFORMS	4	58.	5.	150.	56.	51.0%	4.0%	100.0%	34.0
AUDIO/VISUAL	0	0.	0.	0.	0.	0.0%	0.0%	0.0%	0.0
GOVERNMENT DOCUMENTS	1	15.	15.	15.	0.	75.0%	75.0%	75.0%	0.0
OTHER	1	450.	450.	450.	0.	56.3%	56.3%	56.3%	0.0
TOTAL	10	2233.	1193.	4150.	967.	50.4%	35.8%	66.7%	7.8

TYPE OF MATERIALS	NUMBER OF LIBRARIES REPORTING	ORIGINAL AVERAGE	LOW	HIGH	STD DEV	PERCENT OF TOTAL AVERAGE	LOW	HIGH	STD DEV
BOOKSTOCK	8	1894.	973.	2648.	509.	98.7%	93.5%	100.0%	2.1
PERIODICALS	4	52.	10.	123.	43.	3.0%	0.6%	8.1%	3.0
MICROFORMS	4	79.	25.	120.	42.	74.0%	50.0%	100.0%	24.0
AUDIO/VISUAL	3	9.	1.	25.	11.	100.0%	100.0%	100.0%	0.0
GOVERNMENT DOCUMENTS	5	138.	5.	369.	139.	85.0%	25.0%	100.0%	30.0
OTHER	2	176.	1.	350.	175.	71.9%	43.8%	100.0%	28.1
TOTAL	10	2111.	1023.	3467.	597.	49.6%	33.3%	64.2%	7.8

TABLE X: INTERLIBRARY LOAN DEPARTMENT
K: CHARACTERISTICS OF FILLED BORROWING REQUESTS

TYPE OF MATERIALS	NUMBER OF LIBRARIES REPORTING	TOTAL				PERCENT OF TOTAL			
		AVERAGE	LOW	HIGH	STD DEV	AVERAGE	LOW	HIGH	STD DEV
BOOKSTOCK	8	1912.	993.	2648.	492.	100.0%	100.0%	100.0%	0.0
PERIODICALS	8	2246.	1391.	4000.	892.	100.0%	100.0%	100.0%	0.0
MICROFORMS	5	109.	50.	150.	34.	100.0%	100.0%	100.0%	0.0
AUDIO/VISUAL	3	9.	1.	25.	11.	100.0%	100.0%	100.0%	0.0
GOVERNMENT DOCUMENTS	5	141.	20.	369.	137.	100.0%	100.0%	100.0%	0.0
OTHER	2	401.	1.	800.	400.	100.0%	100.0%	100.0%	0.0
TOTAL	10	4343.	2434.	7377.	1413.	100.0%	100.0%	100.0%	0.0

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE X: INTERLIBRARY LOAN DEPARTMENT
10LIBRARIES INCLUDED
L: CHARACTERISTICS OF FILLED LENDING REQUESTS

TYPE OF MATERIALS	NUMBER OF LIBRARIES REPORTING	PHOTOCOPY/DUPLICATE AVERAGE	LOW	HIGH	STD DEV	PERCENT OF TOTAL AVERAGE	LOW	HIGH	STD DEV
BOOKSTOCK	1	60.	60.	60.	0.	2.3%	2.3%	2.3%	0.0
PERIODICALS	8	4016.	1000.	14295.	3997.	98.4%	87.7%	100.0%	4.0
MICROFORMS	4	158.	25.	375.	131.	67.7%	16.7%	100.0%	33.4
AUDIO/VISUAL	0	0.	0.	0.	0.	0.0%	0.0%	0.0%	0.0
GOVERNMENT DOCUMENTS	1	12.	12.	12.	0.	25.0%	25.0%	25.0%	0.0
OTHER	1	50.	50.	50.	0.	8.0%	8.0%	8.0%	0.0
TOTAL	10	4235.	1025.	14445.	3635.	45.5%	30.0%	58.9%	9.5

TYPE OF MATERIALS	NUMBER OF LIBRARIES REPORTING	ORIGINAL AVERAGE	LOW	HIGH	STD DEV	PERCENT OF TOTAL AVERAGE	LOW	HIGH	STD DEV
BOOKSTOCK	8	3487.	1150.	7725.	2238.	99.7%	97.7%	100.0%	0.8
PERIODICALS	2	1006.	12.	2000.	994.	6.5%	0.8%	12.3%	5.8
MICROFORMS	3	203.	20.	500.	212.	43.1%	5.1%	83.3%	32.0
AUDIO/VISUAL	3	1795.	5.	5278.	2463.	100.0%	100.0%	100.0%	0.0
GOVERNMENT DOCUMENTS	4	194.	20.	391.	168.	93.8%	75.0%	100.0%	10.8
OTHER	1	575.	575.	575.	0.	92.0%	92.0%	92.0%	0.0
TOTAL	10	4788.	1175.	11130.	2938.	54.3%	41.1%	70.0%	9.5

TABLE X: INTERLIBRARY LOAN DEPARTMENT
L: CHARACTERISTICS OF FILLED LENDING REQUESTS

TYPE OF MATERIALS	NUMBER OF LIBRARIES REPORTING	TOTAL				PERCENT OF TOTAL			
		AVERAGE	LOW	HIGH	STD DEV	AVERAGE	LOW	HIGH	STD DEV
BOOKSTOCK	8	3494.	1150.	7725.	2235.	100.0%	100.0%	100.0%	0.0
PERIODICALS	8	4267.	1000.	16295.	4642.	100.0%	100.0%	100.0%	0.0
MICROFORMS	4	310.	25.	600.	213.	100.0%	100.0%	100.0%	0.0
AUDIO/VISUAL	3	1795.	5.	5278.	2463.	100.0%	100.0%	100.0%	0.0
GOVERNMENT DOCUMENTS	4	197.	20.	391.	165.	100.0%	100.0%	100.0%	0.0
OTHER	1	625.	625.	625.	0.	100.0%	100.0%	100.0%	0.0
TOTAL	10	9028.	2250.	25575.	6267.	100.0%	100.0%	100.0%	0.0

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE XI: ADMINISTRATIVE DEPARTMENT
10 LIBRARIES INCLUDED
A: BUDGET PROFILE

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	DEPARTMENT AVERAGE	DEPARTMENT LOW	DEPARTMENT HIGH	DEPARTMENT STD DEV	NUMBER OF LIBRARIES REPORTING	INCREASE OVER LAST YEAR'S EXPENDITURES AVERAGE	INCREASE OVER LAST YEAR'S EXPENDITURES LOW	INCREASE OVER LAST YEAR'S EXPENDITURES HIGH	INCREASE OVER LAST YEAR'S EXPENDITURES STD DEV
TOTAL OPERATING	10	241087.	108011.	606537.	133704.	10	24765.	4875.	55641.	15299.
SALARIES AND FRINGE BENEFITS	10	221325.	101651.	468451.	97174.	10	28395.	4885.	55641.	17189.
AUTOMATED SYSTEMS	1	10276.	10276.	10276.	0.	1	7876.	7876.	7876.	0.
OTHER SUPPORT SERVICES	4	30431.	1700.	115219.	48954.	4	-14963.	-42822.	239.	19727.
EQUIPMENT RENTAL	3	14542.	2400.	27600.	10308.	3	2896.	960.	4832.	1936.
COMMUNICATIONS	4	3882.	990.	7536.	2450.	4	-182.	-500.	308.	308.
SUPPLIES	4	1569.	770.	22[illegible]8.	546.	4	-186.	-1278.	261.	632.
OTHER OPERATING	1	200.	200.	200.	0.	1	20.	20.	20.	0.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE XI: ADMINISTRATIVE DEPARTMENT
10 LIBRARIES INCLUDED
A: BUDGET PROFILE

BUDGET CATEGORY	NUMBER OF LIBRARIES REPORTING	LAST YEAR'S EXPENDITURES AVERAGE	LOW	HIGH	STD DEV
TOTAL OPERATING	10	218799.	103136.	593785.	132606.
SALARIES AND FRINGE BENEFITS	10	195770.	96766.	416057.	84057.
AUTOMATED SYSTEMS	1	2400.	2400.	2400.	0.
OTHER SUPPORT SERVICES	4	41653.	1461.	158041.	67211.
EQUIPMENT RENTAL	3	12611.	2400.	26640.	10258.
COMMUNICATIONS	4	4063.	1150.	7910.	2471.
SUPPLIES	4	1755.	640.	2984.	865.
OTHER OPERATING	1	180.	180.	180.	0.

A: SURVEY OF 100 LIBRARIES, LARGE ACADEMIC STRATUM

TABLE XI: ADMINISTRATIVE DEPARTMENT
10 LIBRARIES INCLUDED
B: STAFFING AND SALARY EXPENDITURES

TYPE OF EMPLOYEE	NUMBER OF LIBRARIES REPORTING	FULL TIME EQUIVALENCIES AVERAGE	LOW	HIGH	STD DEV	NUMBER OF LIBRARIES REPORTING	ANNUAL SALARY EXPENDITURES,$ AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	10	4.95	2.00	8.00	1.74	10	115477.	52340.	189444.	36056.
OTHER PROFESSIONAL	5	1.80	1.00	3.00	0.75	5	29698.	13600.	54000.	14362.
LIBRARY ASSISTANT	2	3.50	1.00	6.00	2.50	2	36512.	10328.	62695.	26183.
CLERK	9	6.06	2.00	14.50	4.40	9	55725.	11258.	130608.	42123.
STUDENT / PAGE	7	1.14	0.25	2.80	0.98	8	5081.	593.	12896.	4398.
OTHER	3	2.50	1.00	3.50	1.08	3	26659.	12576.	41352.	11756.
STAFF PAID BY OUTSIDE SOURCES	3	2.55	0.30	6.35	2.70	0	0.	0.	0.	0.
VOLUNTEER	0	0.0	0.0	0.0	0.0	0	0.	0.	0.	0.

TYPE OF EMPLOYEE	NUMBER OF FTE REPORTED	AVERAGE SALARY PER FTE AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	49.50	23329.	16178.	28842.	4729.
OTHER PROFESSIONAL	9.00	16499.	13600.	18000.	1377.
LIBRARY ASSISTANT	7.00	10432.	10328.	10449.	42.
CLERK	54.50	9202.	5629.	11322.	1239.
STUDENT / PAGE	7.99	4910.	1977.	8567.	1420.
OTHER	7.50	10664.	8683.	12576.	1636.

A: SURVEY OF 100 LIBRARIES. LARGE ACADEMIC STRATUM

TABLE XI: ADMINISTRATIVE DEPARTMENT
10 LIBRARIES INCLUDED
B: STAFFING AND SALARY EXPENDITURES

TYPE OF EMPLOYEE	NUMBER OF FTE REPORTED	TOTAL LIBRARY FTE PER ADM FTE AVERAGE	LOW	HIGH	STD DEV	NUMBER OF LIBRARIES REPORTING	ANNUAL ADM SAL $ EXP PER TOTAL LIBRARY FTE AVERAGE	LOW	HIGH	STD DEV
PROFESSIONAL LIBRARIAN	49.50	51.20	19.80	114.25	19.69	10	532.18	229.06	1318.80	297.52
OTHER PROFESSIONAL	9.00	133.23	49.50	228.50	78.74	5	155.14	59.52	313.92	105.13
LIBRARY ASSISTANT	7.00	81.57	78.67	99.00	7.12	2	118.58	104.32	132.83	14.25
CLERK	54.50	37.84	14.14	114.25	27.97	9	253.05	55.14	564.66	182.72
STUDENT / PAGE	7.99	220.62	75.36	780.00	182.15	8	20.52	2.90	54.27	15.29
OTHER	7.50	115.30	68.06	217.49	48.42	3	92.91	57.82	127.58	28.48
STAFF PAID BY OUTSIDE SOURCES	7.65	82.70	34.25	680.60	134.61	0	0.0	0.0	0.0	0.0
VOLUNTEER	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0
TOTAL	143.14	17.71	6.60	38.08	8.59	10	905.50	386.53	2315.98	513.22

120.

APPENDIX F

TABLES GENERATED BY THE FACT SUBROUTINE

LIBRARY NO 1
ILL ACTIVITY SHEET SUMMARY I: TIME PROFILE

ACT NO	TIME,MIN EMPLOYEE CATEGORY,* A	B	C	D	E	F	G	H	TOTAL	PERCENT OF TOTAL GROUP TIME EMPLOYEE CATEGORY* A	B	C	D	E	F	G	H
1	0	0	1095	0	0	0	0	0	1095	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2	195	0	640	0	149	0	0	0	984	2.2%	0.0%	2.9%	0.0%	2.5%	0.0%	0.0%	0.0%
3	0	0	270	0	0	0	0	0	270	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%
4	0	0	315	0	0	0	0	0	315	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%
5	0	0	855	0	0	0	0	0	855	0.0%	0.0%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%
6	0	0	465	0	1150	0	0	0	1615	0.0%	0.0%	2.1%	0.0%	19.6%	0.0%	0.0%	0.0%
7	0	0	115	0	350	0	0	0	465	0.0%	0.0%	0.5%	0.0%	6.0%	0.0%	0.0%	0.0%
8	0	0	120	0	5	0	0	0	125	0.0%	0.0%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%
9	0	0	95	0	1004	247	0	0	1346	0.0%	0.0%	0.4%	0.0%	17.2%	8.4%	0.0%	0.0%
10	0	0	0	0	0	1741	0	0	1741	0.0%	0.0%	0.0%	0.0%	0.0%	59.2%	0.0%	0.0%
11	0	0	335	0	894	0	0	0	1229	0.0%	0.0%	1.5%	0.0%	15.3%	0.0%	0.0%	0.0%
12	0	0	195	230	330	46	0	0	801	0.0%	0.0%	0.9%	45.1%	5.6%	1.6%	0.0%	0.0%
13	0	0	200	0	0	0	0	0	200	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
14	0	0	120	45	0	0	0	0	165	0.0%	0.0%	0.5%	8.8%	0.0%	0.0%	0.0%	0.0%
15	0	0	110	0	0	82	0	0	192	0.0%	0.0%	0.5%	0.0%	0.0%	2.8%	0.0%	0.0%
16	0	0	2690	0	0	0	0	0	2690	0.0%	0.0%	12.2%	0.0%	0.0%	0.0%	0.0%	0.0%
17	-NE-																
18	-NE-																
19	80	0	0	0	0	0	0	0	80	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
20	225	0	1525	0	0	191	0	0	1941	2.5%	0.0%	6.9%	0.0%	0.0%	6.5%	0.0%	0.0%
21	785	0	1725	0	0	0	0	0	2510	8.7%	0.0%	7.8%	0.0%	0.0%	0.0%	0.0%	0.0%
22	0	0	615	0	0	0	0	0	615	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%
23	0	0	350	0	355	0	0	0	705	0.0%	0.0%	1.6%	0.0%	6.1%	0.0%	0.0%	0.0%
24	50	0	265	40	420	77	0	0	852	0.6%	0.0%	1.2%	7.8%	7.2%	2.6%	0.0%	0.0%

NOTE: -NE- , NO ENTRY FOR THIS TASK
* EMPLOYEE CATEGORY DESIGNATIONS: A,PROFESSIONAL LIBRARIAN; B, OTHER PROFESSIONAL; C, LIBRARY ASSISTANT; D, CLERK; E, STUDENT/PAGE; F, OTHER; G, PAID BY OUTSIDE SOURCE; H, VOLUNTEER.

LIBRARY NO 1
ILL ACTIVITY SHEET SUMMARY I: TIME PROFILE

ACT NO	TIME, MIN EMPLOYEE CATEGORY,* A	B	C	D	E	F	G	H	TOTAL	PERCENT OF TOTAL GROUP TIME EMPLOYEE CATEGORY* A	B	C	D	E	F	G	H
25	0	0	1195	0	0	0	0	0	1195	0.0%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%
26	0	0	725	0	0	0	0	0	725	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%
27	0	0	205	0	0	0	0	0	205	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
28	0	0	215	0	0	395	0	0	610	0.0%	0.0%	1.0%	0.0%	0.0%	13.4%	0.0%	0.0%
29	10	0	185	0	0	0	0	0	195	0.1%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
30	0	0	135	0	0	0	0	0	135	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
31	420	0	405	0	0	0	0	0	825	4.6%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%
32	0	0	0	195	236	50	0	0	481	0.0%	0.0%	0.0%	38.2%	4.0%	1.7%	0.0%	0.0%
33	0	0	200	0	0	0	0	0	200	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
34	1620	0	3525	0	60	50	0	0	5255	17.9%	0.0%	16.0%	0.0%	1.0%	1.7%	0.0%	0.0%
35	135	0	1180	0	230	60	0	0	1605	1.5%	0.0%	5.3%	0.0%	3.9%	2.0%	0.0%	0.0%
36	200	0	475	0	550	0	0	0	1225	2.2%	0.0%	2.2%	0.0%	9.4%	0.0%	0.0%	0.0%
37	20	0	210	0	0	0	0	0	230	0.2%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
38	0	0	175	0	0	0	0	0	175	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
39	0	0	380	0	0	0	0	0	380	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%
40	0	0	105	0	0	0	0	0	105	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
41	0	0	100	0	0	0	0	0	100	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
42	0	0	560	0	120	0	0	0	680	0.0%	0.0%	2.5%	0.0%	2.1%	0.0%	0.0%	0.0%
43	5295	0	0	0	0	0	0	0	5295	58.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOTAL	9035	0	22075	510	5853	2939	0	0	40412	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%

NOTE: -NE- , NO ENTRY FOR THIS TASK
* EMPLOYEE CATEGORY DESIGNATIONS: A,PROFESSIONAL LIBRARIAN; B, OTHER PROFESSIONAL; C, LIBRARY ASSISTANT; D, CLERK; E, STUDENT/PAGE; F, OTHER; G, PAID BY OUTSIDE SOURCE; H, VOLUNTEER.

LIBRARY NO 1
ILL ACTIVITY SHEET SUMMARY II: TASK TIME PROFILE

ACT NO	TOTAL TASK TIME,MIN	PERCENT OF TOTAL TASK TIME EMPLOYEE CATEGORY* A	B	C	D	E	F	G	H	VOLUME	UNIT TIME,MIN	INC
1	1095	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1438	0.76	0
2	984	19.8%	0.0%	65.0%	0.0%	15.1%	0.0%	0.0%	0.0%	142	6.93	0
3	270	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	268	1.01	0
4	315	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	248	1.27	0
5	855	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	284	3.01	0
6	1615	0.0%	0.0%	28.8%	0.0%	71.2%	0.0%	0.0%	0.0%	670	2.41	0
7	465	0.0%	0.0%	24.7%	0.0%	75.3%	0.0%	0.0%	0.0%	336	1.38	0
8	125	0.0%	0.0%	96.0%	0.0%	4.0%	0.0%	0.0%	0.0%	239	0.52	0
9	1346	0.0%	0.0%	7.1%	0.0%	74.6%	18.4%	0.0%	0.0%	4154	0.32	1
10	1741	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	2386	0.73	0
11	1229	0.0%	0.0%	27.3%	0.0%	72.7%	0.0%	0.0%	0.0%	581	2.12	0
12	801	0.0%	0.0%	24.3%	28.7%	41.2%	5.7%	0.0%	0.0%	315	2.54	0
13	200	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	150	1.33	0
14	165	0.0%	0.0%	72.7%	27.3%	0.0%	0.0%	0.0%	0.0%	110	1.50	0
15	192	0.0%	0.0%	57.3%	0.0%	0.0%	42.7%	0.0%	0.0%	298	0.64	0
16	2690	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1891	1.42	0
17	-NE-											
18	-NE-											
19	80	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-NE-		
20	1941	11.6%	0.0%	78.6%	0.0%	0.0%	9.8%	0.0%	0.0%	452	3.19	1
21	2510	31.3%	0.0%	68.7%	0.0%	0.0%	0.0%	0.0%	0.0%	403	6.23	0
22	615	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	253	2.43	0
23	705	0.0%	0.0%	49.6%	0.0%	50.4%	0.0%	0.0%	0.0%	511	1.38	0
24	852	5.9%	0.0%	31.1%	4.7%	49.3%	9.0%	0.0%	0.0%	296	2.71	1

NOTE: -NE- , NO ENTRY FOR THIS TASK
* EMPLOYEE CATEGORY DESIGNATIONS: A.PROFESSIONAL LIBRARIAN; B. OTHER PROFESSIONAL; C. LIBRARY ASSISTANT; D. CLERK; E. STUDENT/PAGE; F. OTHER; G. PAID BY OUTSIDE SOURCE; H. VOLUNTEER.

LIBRARY NO 1
ILL ACTIVITY SHEET SUMMARY II: TASK TIME PROFILE

ACT NO	TOTAL TASK TIME,MIN	PERCENT OF TOTAL TASK TIME EMPLOYEE CATEGORY* A	B	C	D	E	F	G	H	VOLUME	UNIT TIME,MIN	INC
25	1195	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	692	1.73	0
26	725	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	291	2.49	0
27	205	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	82	2.50	0
28	610	0.0%	0.0%	35.2%	0.0%	0.0%	64.8%	0.0%	0.0%	110	1.95	1
29	195	5.1%	0.0%	94.9%	0.0%	0.0%	0.0%	0.0%	0.0%	32	6.09	0
30	135	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32	4.22	0
31	825	50.9%	0.0%	49.1%	0.0%	0.0%	0.0%	0.0%	0.0%	388	2.05	1
32	481	0.0%	0.0%	0.0%	40.5%	49.1%	10.4%	0.0%	0.0%	128	3.76	0
33	200	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	704	0.28	0
34	5255	30.8%	0.0%	67.1%	0.0%	1.1%	1.0%	0.0%	0.0%	533	0.66	1
35	1605	8.4%	0.0%	73.5%	0.0%	14.3%	3.7%	0.0%	0.0%	-NE-		
36	1225	16.3%	0.0%	38.8%	0.0%	44.9%	0.0%	0.0%	0.0%	55	1.18	1
37	230	8.7%	0.0%	91.3%	0.0%	0.0%	0.0%	0.0%	0.0%	42	5.00	1
38	175	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	56	1.07	1
39	380	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	233	1.63	0
40	105	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	74	1.42	0
41	100	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4	5.00	1
42	680	0.0%	0.0%	82.4%	0.0%	17.6%	0.0%	0.0%	0.0%	765	0.51	1
43	5295	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-NE-		
TOTAL	40412	22.4%	0.0%	54.6%	1.3%	14.5%	7.3%	0.0%	0.0%			

NOTE: -NE- , NO ENTRY FOR THIS TASK
* EMPLOYEE CATEGORY DESIGNATIONS: A,PROFESSIONAL LIBRARIAN; B, OTHER PROFESSIONAL; C, LIBRARY ASSISTANT; D, CLERK; E, STUDENT/PAGE; F, OTHER; G, PAID BY OUTSIDE SOURCE; H, VOLUNTEER.

LIBRARY NO 1
ILL ACTIVITY SHEET SUMMARY III: COST PROFILE

ACT NO	TASK COST($) BY EMPLOYEE CATEGORY*								DIRECT TASK COST.$	ADMIN.# TASK COST.$	VOL-UME	DIRECT UNIT COST.$	ADMIN.# UNIT COST.$	TOTAL UNIT COST.$	INC
	A	B	C	D	E	F	G	H							
1	0.0	0.0	90.81	0.0	0.0	0.0	0.0	0.0	90.81	6.63	1438	0.06	0.00	0.07	0
2	37.80	0.0	56.80	0.0	5.71	0.0	0.0	0.0	100.31	5.96	142	0.71	0.04	0.75	0
3	0.0	0.0	23.96	0.0	0.0	0.0	0.0	0.0	23.96	1.63	268	0.09	0.01	0.10	0
4	0.0	0.0	28.12	0.0	0.0	0.0	0.0	0.0	28.12	1.91	248	0.11	0.01	0.12	0
5	0.0	0.0	76.14	0.0	0.0	0.0	0.0	0.0	76.14	5.18	284	0.27	0.02	0.29	0
6	0.0	0.0	41.21	0.0	44.08	0.0	0.0	0.0	85.30	9.78	670	0.13	0.01	0.14	0
7	0.0	0.0	10.27	0.0	13.42	0.0	0.0	0.0	23.68	2.82	336	0.07	0.01	0.08	0
8	0.0	0.0	10.71	0.0	0.19	0.0	0.0	0.0	10.90	0.76	239	0.05	0.00	0.05	0
9	0.0	0.0	8.48	0.0	39.09	16.80	0.0	0.0	64.37	8.15	4154	0.02	0.00	0.02	1
10	0.0	0.0	0.0	0.0	0.0	207.57	0.0	0.0	207.57	10.54	2386	0.09	0.00	0.09	0
11	0.0	0.0	29.65	0.0	34.27	0.0	0.0	0.0	63.92	7.44	581	0.11	0.01	0.12	0
12	0.0	0.0	17.41	11.99	-12.65	3.81	0.0	0.0	45.86	4.85	315	0.15	0.02	0.16	0
13	0.0	0.0	17.86	0.0	0.0	0.0	0.0	0.0	17.86	1.21	150	0.12	0.01	0.13	0
14	0.0	0.0	10.71	2.34	0.0	0.0	0.0	0.0	13.06	1.00	110	0.12	0.01	0.13	0
15	0.0	0.0	9.82	0.0	0.0	6.80	0.0	0.0	16.62	1.16	298	0.06	0.00	0.06	0
16	0.0	0.0	198.23	0.0	0.0	0.0	0.0	0.0	198.23	10.29	1891	0.10	0.01	0.11	0
17	-NE-														
18	-NE-														
19	15.51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.51	0.48	-NE-				
20.	43.61	0.0	135.40	0.0	0.0	24.18	0.0	0.0	203.19	11.75	452	0.32	0.02	0.34	1
21	152.17	0.0	196.46	0.0	0.0	0.0	0.0	0.0	348.62	15.20	403	0.87	0.04	0.90	0
22	0.0	0.0	70.04	0.0	0.0	0.0	0.0	0.0	70.04	3.72	253	0.28	0.01	0.29	0
23	0.0	0.0	25.71	0.0	13.61	0.0	0.0	0.0	39.32	4.27	511	0.08	0.01	0.09	0
24	9.69	0.0	19.67	2.08	16.10	6.38	0.0	0.0	53.93	5.16	296	0.15	0.02	0.17	1

NOTE: -NE- , NO ENTRY FOR THIS TASK
* EMPLOYEE CATEGORY DESIGNATIONS: A.PROFESSIONAL LIBRARIAN; B. OTHER PROFESSIONAL; C. LIBRARY ASSISTANT; D. CLERK;
E. STUDENT/PAGE; F. OTHER; G. PAID BY OUTSIDE SOURCE; H. VOLUNTEER.
ADMINISTRATIVE COST DISTRIBUTED FROM ADMINISTRATIVE DEPARTMENT BUDGET

LIBRARY NO 1
ILL ACTIVITY SHEET SUMMARY III: COST PROFILE

ACT NO	A	B	TASK COST($) BY EMPLOYEE CATEGORY* C	D	E	F	G	H	DIRECT TASK COST,$	ADMIN.# TASK COST,$	VOLUME	DIRECT UNIT COST,$	ADMIN.# UNIT COST,$	TOTAL UNIT COST,$	INC
25	0.0	0.0	101.53	0.0	0.0	0.0	0.0	0.0	101.53	7.23	692	0.15	0.01	0.16	0
26	0.0	0.0	70.24	0.0	0.0	0.0	0.0	0.0	70.24	4.39	291	0.24	0.02	0.26	0
27	0.0	0.0	23.35	0.0	0.0	0.0	0.0	0.0	23.35	1.24	82	0.28	0.02	0.30	0
28	0.0	0.0	15.79	0.0	0.0	51.44	0.0	0.0	67.23	3.69	110	0.14	0.01	0.16	1
29	1.94	0.0	13.59	0.0	0.0	0.0	0.0	0.0	15.53	1.18	32	0.49	0.04	0.52	0
30	0.0	0.0	9.92	0.0	0.0	0.0	0.0	0.0	9.92	0.82	32	0.31	0.03	0.34	0
31	81.41	0.0	29.75	0.0	0.0	0.0	0.0	0.0	111.16	4.99	388	0.27	0.01	0.28	1
32	0.0	0.0	0.0	10.16	9.05	4.14	0.0	0.0	23.35	2.91	128	0.18	0.02	0.21	0
33	0.0	0.0	14.69	0.0	0.0	0.0	0.0	0.0	14.69	1.21	704	0.02	0.00	0.02	0
34	314.02	0.0	320.59	0.0	2.30	6.51	0.0	0.0	643.42	31.82	533	0.05	0.00	0.05	1
35	26.17	0.0	106.71	0.0	8.82	6.75	0.0	0.0	148.45	9.72	-NE-				
36	38.77	0.0	44.71	0.0	21.08	0.0	0.0	0.0	104.56	7.42	55	0.10	0.01	0.11	1
37	3.88	0.0	15.43	0.0	0.0	0.0	0.0	0.0	19.30	1.39	42	0.37	0.03	0.40	1
38	0.0	0.0	15.62	0.0	0.0	0.0	0.0	0.0	15.62	1.06	56	0.10	0.01	0.10	1
39	0.0	0.0	43.28	0.0	0.0	0.0	0.0	0.0	43.28	2.30	233	0.19	0.01	0.20	0
40	0.0	0.0	11.96	0.0	0.0	0.0	0.0	0.0	11.96	0.64	74	0.16	0.01	0.17	0
41	0.0	0.0	11.39	0.0	0.0	0.0	0.0	0.0	11.39	0.61	4	0.57	0.03	0.60	1
42	0.0	0.0	43.16	0.0	4.60	0.0	0.0	0.0	47.76	4.12	765	0.04	0.00	0.04	1
43	1026.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1026.39	32.06	-NE-				
TOTAL	1751.36	0.0	1969.15	26.58	224.97	334.38	0.0	0.0	4306.43	244.67					

NOTE: -NE- , NO ENTRY FOR THIS TASK
* EMPLOYEE CATEGORY DESIGNATIONS: A.PROFESSIONAL LIBRARIAN: B. OTHER PROFESSIONAL: C. LIBRARY ASSISTANT: D. CLERK: E. STUDENT/PAGE: F. OTHER: G. PAID BY OUTSIDE SOURCE: H. VOLUNTEER.
# ADMINISTRATIVE COST DISTRIBUTED FROM ADMINISTRATIVE DEPARTMENT BUDGET

LIBRARY NO 1

ILL ACTIVITY SHEET SUMMARY IV: PROFILE OF TOTAL TASK COST

ACT NO	DIRECT TASK COST,$	ADMIN. DEPT.* BUDGET	ADMIN. TASK** COST,$	TOTAL TASK COST,$	ADMIN. (2)	PERCENT OF TOTAL TASK COST EMPLOYEE CATEGORY* A	B	C	D	E	F	G	H
1	90.81	6.63	21.03	118.48	23.3%	0.0%	0.0%	76.7%	0.0%	0.0%	0.0%	0.0%	0.0%
2	100.31	5.96	18.90	125.16	19.9%	30.2%	0.0%	45.4%	0.0%	4.6%	0.0%	0.0%	0.0%
3	23.96	1.63	5.19	30.78	22.2%	0.0%	0.0%	77.8%	0.0%	0.0%	0.0%	0.0%	0.0%
4	28.12	1.91	6.05	36.08	22.1%	0.0%	0.0%	77.9%	0.0%	0.0%	0.0%	0.0%	0.0%
5	76.14	5.18	16.42	97.74	22.1%	0.0%	0.0%	77.9%	0.0%	0.0%	0.0%	0.0%	0.0%
6	85.30	9.78	31.02	126.09	32.4%	0.0%	0.0%	32.7%	0.0%	35.0%	0.0%	0.0%	0.0%
7	23.66	2.82	8.93	35.43	33.2%	0.0%	0.0%	29.0%	0.0%	37.9%	0.0%	0.0%	0.0%
8	10.90	0.76	2.40	14.06	22.5%	0.0%	0.0%	76.2%	0.0%	1.4%	0.0%	0.0%	0.0%
9	64.37	8.15	25.85	98.38	34.6%	0.0%	0.0%	8.6%	0.0%	39.7%	17.1%	0.0%	0.0%
10	207.57	10.54	33.44	251.55	17.5%	0.0%	0.0%	0.0%	0.0%	0.0%	82.5%	0.0%	0.0%
11	63.92	7.44	23.60	94.97	32.7%	0.0%	0.0%	31.2%	0.0%	36.1%	0.0%	0.0%	0.0%
12	45.86	4.85	15.38	66.09	30.6%	0.0%	0.0%	26.3%	18.1%	19.1%	5.8%	0.0%	0.0%
13	17.86	1.21	3.84	22.91	22.1%	0.0%	0.0%	77.9%	0.0%	0.0%	0.0%	0.0%	0.0%
14	13.06	1.00	3.17	17.23	24.2%	0.0%	0.0%	62.2%	13.6%	0.0%	0.0%	0.0%	0.0%
15	16.62	1.16	3.69	21.47	22.6%	0.0%	0.0%	45.7%	0.0%	0.0%	31.7%	0.0%	0.0%
16	198.23	16.29	51.67	266.18	25.5%	0.0%	0.0%	74.5%	0.0%	0.0%	0.0%	0.0%	0.0%
17	-NE-												
18	-NE-												
19	15.51	0.48	1.54	17.53	11.5%	88.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
20	203.19	11.75	37.28	252.22	19.4%	17.3%	0.0%	53.7%	0.0%	0.0%	9.6%	0.0%	0.0%
21	348.62	16.20	48.21	412.03	15.4%	36.9%	0.0%	47.7%	0.0%	0.0%	0.0%	0.0%	0.0%
22	70.04	3.72	11.81	85.58	18.2%	0.0%	0.0%	81.8%	0.0%	0.0%	0.0%	0.0%	0.0%
23	39.32	4.27	13.54	57.13	31.2%	0.0%	0.0%	45.0%	0.0%	23.8%	0.0%	0.0%	0.0%
24	53.93	5.16	16.36	75.45	28.5%	12.8%	0.0%	26.1%	2.8%	21.3%	8.5%	0.0%	0.0%

NOTE: -NE- , NO ENTRY FOR THIS TASK

* EMPLOYEE CATEGORY DESIGNATIONS: A,PROFESSIONAL LIBRARIAN; B, OTHER PROFESSIONAL; C, LIBRARY ASSISTANT; D, CLERK; E, STUDENT/PAGE; F, OTHER; G, PAID BY OUTSIDE SOURCE; H, VOLUNTEER.

(2)ADMINISTRATIVE COST DISTRIBUTED FROM ADMINISTRATIVE DEPARTMENT BUDGET

LIBRARY NO 1
ILL ACTIVITY SHEET SUMMARY IV: PROFILE OF TOTAL TASK COST

ACT NO	DIRECT TASK COST,$	ADMIN. DEPT.# BUDGET	ADMIN. TASK## COST,$	TOTAL TASK COST,$	PERCENT OF TOTAL TASK COST								
					ADMIN. (2)	EMPLOYEE CATEGORY*							
						A	B	C	D	E	F	G	H
25	101.53	7.23	22.95	131.71	22.9%	0.0%	0.0%	77.1%	0.0%	0.0%	0.0%	0.0%	0.0%
26	70.24	4.39	13.92	88.55	20.7%	0.0%	0.0%	79.3%	0.0%	0.0%	0.0%	0.0%	0.0%
27	23.35	1.24	3.94	28.53	18.2%	0.0%	0.0%	81.8%	0.0%	0.0%	0.0%	0.0%	0.0%
28	67.23	3.69	11.72	82.64	18.6%	0.0%	0.0%	19.1%	0.0%	0.0%	62.2%	0.0%	0.0%
29	15.53	1.18	3.75	20.45	24.1%	9.5%	0.0%	66.4%	0.0%	0.0%	0.0%	0.0%	0.0%
30	9.92	0.82	2.59	13.33	25.6%	0.0%	0.0%	74.4%	0.0%	0.0%	0.0%	0.0%	0.0%
31	111.16	4.99	15.85	132.00	15.8%	61.7%	0.0%	22.5%	0.0%	0.0%	0.0%	0.0%	0.0%
32	23.35	2.91	9.24	35.50	34.2%	0.0%	0.0%	0.0%	28.6%	25.5%	11.7%	0.0%	0.0%
33	14.69	1.21	3.84	19.74	25.6%	0.0%	0.0%	74.4%	0.0%	0.0%	0.0%	0.0%	0.0%
34##	643.42	31.82	## ADMINISTRATIVE TASKS, DISTRIBUTED IN 'ADMIN TASK COST' OVER ALL OTHER TASKS										
35	148.45	9.72	30.83	188.99	21.5%	13.8%	0.0%	56.5%	0.0%	4.7%	3.6%	0.0%	0.0%
36	104.56	7.42	23.53	135.51	22.8%	28.6%	0.0%	33.0%	0.0%	15.6%	0.0%	0.0%	0.0%
37	19.30	1.39	4.42	25.11	23.1%	15.4%	0.0%	61.4%	0.0%	0.0%	0.0%	0.0%	0.0%
38	15.62	1.06	3.36	20.04	22.1%	0.0%	0.0%	77.9%	0.0%	0.0%	0.0%	0.0%	0.0%
39	43.28	2.30	7.30	52.88	18.2%	0.0%	0.0%	81.8%	0.0%	0.0%	0.0%	0.0%	0.0%
40	11.96	0.64	2.02	14.61	18.2%	0.0%	0.0%	81.8%	0.0%	0.0%	0.0%	0.0%	0.0%
41	11.39	0.61	1.92	13.91	18.2%	0.0%	0.0%	81.8%	0.0%	0.0%	0.0%	0.0%	0.0%
42	47.76	4.12	13.06	64.93	26.5%	0.0%	0.0%	66.5%	0.0%	7.1%	0.0%	0.0%	0.0%
43	1026.39	32.06	101.70	1160.15	11.5%	88.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOTAL	3663.01	212.85	675.24	4551.10	19.5%	31.6%	0.0%	36.2%	0.6%	4.9%	7.2%	0.0%	0.0%

NOTE: -NE- , NO ENTRY FOR THIS TASK
* EMPLOYEE CATEGORY DESIGNATIONS: A,PROFESSIONAL LIBRARIAN; B, OTHER PROFESSIONAL; C, LIBRARY ASSISTANT; D, CLERK;
E, STUDENT/PAGE; F, OTHER; G, PAID BY OUTSIDE SOURCE; H, VOLUNTEER.
ADMINISTRATIVE COST DISTRIBUTED FROM ADMINISTRATIVE DEPARTMENT BUDGET